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UNITED STATES DEPARTMENT OF AGRICULTURE
BULLETIN No. 1132

Washington, D. C.

PROFESSIONAL PAPER

March 21, 1923

THE RESULTS OF PHYSICAL TESTS
OF ROAD-BUILDING ROCK
FROM 1916 TO 1921,
INCLUSIVE

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INTRODUCTION.

This bulletin gives the results of tests of all rock made by the Bureau of Public Roads from January 1, 1916, to January 1, 1922, classified alphabetically according to location. It supplements United States Department of Agriculture Bulletin 370, "Results of Physical Tests of Road-Building Rock," and replaces United States Department of Agriculture Bulletin 670, "Results of Tests of Road-Building Rock in 1916 and 1917." The results of tests of approximately 5,300 samples are now available in the two bulletins, and these tests represent road-building material from practically all parts of the United States and some parts of Canada, Haiti, the Dominican Republic, and Porto Rico. Reference to Table 1, in which the results of tests made subsequent to January 1, 1916, are tabulated, will show that a test of crushing strength has been made on a number of samples, and a column of test results not found in Bulletin No. 370 is added thereby. Tests of crushing strength made prior to 1916 are recorded in Table 2. This quality of rock is not determined ordinarily when making examinations of their suitability for road building, but it is employed often when considering rock for use as paving blocks or as railroad ballast. A brief description of this test as made by the Bureau of Public Roads is given on page 46.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922.

ALABAMA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight, per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13387	Anniston.....	Calhoun.....	Limestone.....	(2)	170	0.22	6.8	5.9	14.7	4
13388	do.....	do.....	Magnesium limestone.....	(2)	174	.64	6.0	6.7	17.3	9
13389	Anniston (near).....	do.....	Limestone.....	(2)	169	.27	4.8	8.3	14.7	9
13390	Anniston.....	do.....	Siliceous dolomite.....	(2)	175	.30	4.6	8.7	17.3	6
13506	do.....	do.....	Sandstone.....	(2)	154	1.33	6.1	6.5	19.1	10
13507	do.....	do.....	Limestone.....	(2)	169	.16	4.7	8.5	15.3	8
13508	do.....	do.....	do.....	(2)	172	.68	11.6	3.4	(2)	(2)
13509	do.....	do.....	do.....	(2)	140	.12	5.4	7.4	16.0	6
18712	do.....	do.....	Blast furnace slag.....	(2)	179	.57	2.4	16.7	17.0	12
20841	do.....	do.....	Slag.....	(2)	149	1.68	11.5	3.5	13.3	7
13510	Camp McClellan.....	do.....	Dolomite.....	(2)	175	.38	5.0	8.0	16.0	8
13504	Weavers Cave.....	do.....	do.....	(2)	172	.89	7.2	5.5	(2)	(2)
14450	(1).....	(1).....	Quartzite schist.....	(2)	164	.38	4.4	9.1	18.7	19
20821	(1).....	(1).....	Bituminous limestone.....	(2)	144	1.19	3.8	8.5	13.7	5
10138	Bridgeport.....	Colbert.....	Oolitic limestone.....	(2)	168	.21	4.4	9.1	16.3	7
20354	Lim Rock.....	do.....	Limestone.....	(2)	168	.16	4.4	9.1	15.3	8
16112	(1).....	do.....	Crystalline limestone.....	(2)	174	.57	3.8	10.5	18.0	6
16113	(1).....	do.....	Argillaceous limestone.....	(2)	166	.34	5.5	6.5	15.3	6
9985	Birmingham.....	Jefferson.....	Limestone.....	(2)	168	.55	5.0	8.0	(2)	(2)
18721	Ensley.....	do.....	Slag.....	(2)	137	4.44	14.7	2.7	(2)	(2)
19981	Opelika (near).....	Lee.....	Mica.....	(2)	162	2.56	25.3	1.6	(2)	(2)
16186	Athens.....	Limestone.....	Chert.....	(2)	146	4.10	10.7	3.7	(2)	(2)
16188	do.....	do.....	Dolomite marble.....	(2)	168	.60	4.4	9.1	14.7	7
16189	do.....	do.....	Crystalline limestone.....	(2)	167	.79	5.3	7.6	13.3	5
16074	Hartsella (near).....	do.....	do.....	(2)	165	.81	5.0	8.0	16.3	6
16073	Lacon (near).....	do.....	do.....	(2)	167	.50	3.4	11.8	15.3	8
16073	do.....	do.....	do.....	(2)	168	.45	3.5	11.4	15.3	9
12757	(1).....	do.....	Limestone.....	(2)	168	.38	5.4	10.5	14.5	9
12758	(1).....	Morgan.....	do.....	(2)	166	.11	3.8	7.4	11.9	7
12812	(1).....	do.....	do.....	(2)	167	.19	6.0	6.7	13.3	6
11506	Gautis Quarry.....	Talladega.....	Marble.....	(2)	169	.29	5.9	6.8	9.7	4

ARIZONA.

14119	Douglas.....	Cochise.....	Copper slag.....	217	0.58	5.5	7.3	(²)	9
15295	Grand Canyon.....	Coconino.....	Calcareous sandstone.....	134	8.41	23.3	1.7	0.0	2
15297	do.....	do.....	Siliceous limestone.....	153	4.20	7.9	18.7	(²)	6
15298	do.....	do.....	Chert.....	120	4.50	13.7	2.9	(²)	(²)
15299	do.....	do.....	Dolomite.....	162	2.28	5.0	8.0	(²)	6
13977	Globe.....	Gila.....	Copper slag.....	221	1.28	3.2	12.5	(²)	(²)
13978	do.....	do.....	do.....	220	1.43	3.1	12.9	(²)	9
14746	do.....	do.....	do.....	215	1.75	6.8	5.9	15.0	27
15190	Clifton.....	Greenlee.....	do.....	207	.37	4.5	8.9	18.0	5
11642-A	Tucson (west of).....	Pima.....	Siliceous limestone.....	166	.48	5.4	7.4	15.5	

ARKANSAS.

17696	Cotter.....	Baxter.....	Argillaceous dolomite.....	163	3.96	6.1	6.6	14.0	5
17475	Heber Springs.....	Cleburne.....	Argillaceous sandstone.....	(²)	(²)	4.0	10.0	(²)	(²)
17310	Morrilton.....	Conway.....	Sandstone.....	155	2.10	3.5	11.4	17.7	9
16383	do.....	do.....	Feldspathic sandstone.....	156	3.18	3.9	10.3	13.7	11
20891	Springfield.....	do.....	do.....	164	.80	3.4	11.8	(²)	(²)
12461	Beryl.....	Faulkner.....	Sandstone.....	155	2.01	(²)	(²)	19.3	14
19118	Conway.....	do.....	Ferruginous sandstone.....	159	.18	2.6	15.4	17.3	25
19119	do.....	do.....	Sandstone.....	161	1.62	3.1	12.9	17.3	13
19443	do.....	do.....	do.....	159	3.91	6.0	6.7	13.7	9
19762	Conway (near).....	do.....	Feldspathic sandstone.....	156	2.50	4.3	9.3	13.7	9
20012	do.....	do.....	Sandstone.....	157	2.57	4.0	10.0	16.7	11
20168	do.....	do.....	do.....	154	2.89	4.3	9.3	17.3	9
20169	do.....	do.....	do.....	160	2.36	2.2	18.2	18.0	13
20170	do.....	do.....	do.....	158	2.09	3.2	12.5	18.0	14
20559	Conway (north of).....	do.....	do.....	163	1.79	2.2	18.2	18.0	14
19116	Damascus.....	do.....	do.....	159	1.98	3.2	12.5	17.7	13
18418	Mayflower (near).....	do.....	do.....	162	1.27	2.7	14.8	18.7	10
19117	Wooster.....	do.....	do.....	160	1.35	2.8	14.3	17.3	19
19966	do.....	do.....	do.....	154	2.45	3.2	12.5	15.3	17
20352	do.....	do.....	do.....	150	3.19	5.3	7.5	13.3	8
18419	(¹).....	do.....	do.....	156	2.12	3.7	10.8	18.3	13
19081	(¹).....	do.....	do.....	158	1.84	2.9	13.8	17.3	16
19082	(¹).....	do.....	do.....	162	1.47	3.7	10.8	17.7	15
20333	(¹).....	do.....	do.....	152	3.16	4.7	8.5	18.3	9
15396	Franklin.....	do.....	do.....	163	1.40	3.7	10.8	15.7	11
14425	Peters Bluff.....	Independence.....	Crystalline limestone.....	158	2.26	5.1	7.8	17.0	3
14483	do.....	do.....	Chert.....	166	.60	10.4	3.8	8.3	3
14885	do.....	do.....	Limestone.....	157	2.08	10.8	3.7	(²)	(²)
14886	do.....	do.....	do.....	166	.67	5.4	7.4	15.3	7
				167	.69	10.5	3.8	7.3	3

¹ Exact locality not known.² Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

ARKANSAS—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11511	Pfeiffer.....	Independence.....	Marble.....	(2)	163	1.05	(2)	(2)	14.0	5
19056	Cabin Creek.....	Johnson.....	Feldspathic sandstone.....	(2)	157	2.37	3.2	12.5	15.3	13
9828	Lamar.....	do.....	do.....	21,980	159	1.97	(2)	(2)	18.7	13
14655	do.....	do.....	do.....	(2)	156	2.51	3.5	11.4	(2)	(2)
14969	do.....	do.....	do.....	(2)	(2)	(2)	(2)	(2)	18.0	14
15443	do.....	do.....	do.....	(2)	155	3.27	5.0	8.0	17.0	11
16510	do.....	do.....	do.....	(2)	156	2.57	3.8	10.5	(2)	13
17253	do.....	do.....	do.....	(2)	155	2.69	3.4	11.8	17.3	11
20819	Black Rock.....	Lawrence.....	Dolomite.....	(2)	156	5.95	5.9	6.8	10.7	7
17902	Sloan.....	do.....	Limestone.....	(2)	171	1.24	4.9	8.2	13.0	6
19632	Russellville (near).....	Pope.....	Feldspathic sandstone.....	(2)	160	1.43	3.2	12.5	19.0	13
12993	Little Rock.....	Pulaski.....	Quartzite.....	(2)	165	.38	3.3	12.1	19.3	26
12994	do.....	do.....	do.....	(2)	165	.27	3.3	12.1	19.0	23
14293	do.....	do.....	Porphyritic syenite.....	(2)	163	.20	3.7	10.8	18.5	12
14280	Little Rock (16 miles west of).....	do.....	Sandstone.....	(2)	157	1.76	6.4	6.3	16.3	10
12320	(1).....	do.....	Feldspathic sandstone.....	(2)	162	.96	2.5	16.0	18.9	32
14279	(1).....	do.....	Sodalite syenite.....	(2)	156	1.23	5.0	8.0	18.7	8
9838	Fort Smith.....	Sebastian.....	Sandstone.....	(2)	150	5.09	6.5	5.0	15.3	6
10486	Gillham.....	Sevier.....	Feldspathic quartzite.....	(2)	164	.42	2.3	17.4	19.0	32
13295	White Cliffs.....	do.....	Argillaceous limestone.....	(2)	(2)	(2)	13.9	2.9	0.0	(2)
16657	Williford.....	do.....	Dolomite.....	(2)	169	3.6	3.6	11.1	(2)	(2)
17908	do.....	do.....	do.....	(2)	177	.89	3.7	10.8	14.7	16
16488	Fayetteville.....	Washington.....	Weathered chert.....	(2)	(2)	(2)	2.2	14.0	(2)	(2)
20923	do.....	do.....	Argillaceous limestone.....	(2)	168	1.65	5.4	7.4	15.3	7
15466	Plainview.....	Yell.....	Feldspathic sandstone.....	(2)	152	4.01	4.7	8.5	15.3	6

CALIFORNIA.

11527	San Francisco.....	San Francisco.....	Marble.....	(2)	176	0.35	(2)	(2)	12.0	6
11373	San Jose.....	Santa Clara.....	Feldspathic quartzite.....	(2)	172	.32	1.8	22.2	18.7	18
14496	Kennett.....	Shasta.....	Copper slag.....	(2)	221	1.09	4.9	8.2	17.7	9

1 Exact locality not known.

2 Test not made.

COLORADO.

15782	Boulder.....	Sandstone.....	10,625	151	3.92	8.6	4.7	16.7	7
15783	do.....	do.....	19,110	150	3.53	6.7	6.0	16.7	7
15784	do.....	do.....	17,510	148	2.89	5.1	7.8	16.7	8
13892	Boulder (near)	Feldspar basalt.	(2)	174	.56	2.9	13.8	18.8	18
13684	Longmont.....	Limestone.....	(2)	168	.45	4.6	8.7	13.3	6
9822	Lyons.....	Sandstone.....	(2)	156	1.73	3.4	11.8	18.3	11
9821	Lyons (near).....	Argillaceous limestone.	(2)	162	2.98	4.9	8.2	15.3	7
9823	do.....	Sandstone.....	(2)	156	1.37	2.9	13.8	16.0	14
11169	Denver.....	Smelter slag.....	(2)	216	1.37	7.6	5.3	(2)	(2)
11170	do.....	do.....	(2)	217	.50	5.1	7.8	(2)	(2)
11171	do.....	do.....	(2)	217	.86	4.6	8.7	17.3	15
14998	Globeville.....	Lead slag.....	(2)	217	.49	7.8	5.1	(2)	(2)
11168	Globeville (near)	Augite andesite.....	(2)	169	1.27	2.7	14.8	15.3	17
15016	Pueblo.....	Lead smelter slag.....	(2)	213	.53	5.5	7.3	(2)	(2)
15017	do.....	do.....	(2)	223	.44	6.0	6.7	(2)	(2)
15018	do.....	do.....	(2)	220	.34	5.6	7.1	(2)	(2)

CONNECTICUT.

9944	Plainville.....	Diabase.....	(2)	184	1.14	2.0	20.0	19.0	23
12114-A	Rockyhill.....	Altered diabase.....	33,220	182	.34	2.7	14.8	17.3	21
14965	(1)	do.....	(2)	184	.25	3.0	13.3	18.0	20
14970	(1)	do.....	(2)	185	.24	2.7	14.8	1.73	22
18722	East Canaan.....	Slag.....	(2)	139	1.80	11.0	3.6	(2)	(2)
18710	Middlefield.....	Diabase.....	(2)	184	.26	19.0	19.0	17.7	20
11151	East Haven.....	Altered basalt.....	(2)	169	.63	2.1	10.8	17.3	10
19732	do.....	do.....	(2)	176	.19	3.7	(2)	16.7	10
18226	Milford.....	Hornblende schist.....	(2)	189	.30	4.0	10.0	16.0	11
12115-B	North Branford.....	Diabase.....	(2)	185	.27	4.1	9.8	16.0	12
12018	do.....	do.....	(2)	185	.91	3.8	10.6	15.3	10
12285	Reeds Gap.....	do.....	(2)	182	.49	2.8	14.3	17.3	11
19725	Wood Bridge.....	do.....	10,817	184	.39	2.9	13.8	17.7	14
11067	Waterford.....	Granite.....	30,475	162	.74	30.475	18.7	18.7	13
11068	do.....	Biotite granite.....	23,850	162	.78	(2)	(2)	(2)	8
11069	do.....	do.....	22,170	164	.71	(2)	(2)	(2)	8
9791	Oneco.....	do.....	16,635	(2)	(2)	(2)	(2)	(2)	6
11098	do.....	do.....	23,290	164	.55	(2)	(2)	(2)	8
11099	do.....	Gneissoid granite.....	20,200	163	.67	(2)	(2)	(2)	6
13865	do.....	Granite.....	(2)	(2)	(2)	4.5	8.9	18.0	8
11148	(1)	Gneissoid granite.....	20,825	163	.44	4.6	8.7	18.7	7

1 Exact location not known.

2 Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

DELAWARE.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13893	Elsmere.....	Newcastle.....	Plagioclase gneiss.....	(2)	168	0.20	3.6	11.1	18.7	9
12839	Faulkland.....	do.....	Hypersthene gneiss.....	(2)	184	.04	4.0	10.0	18.0	14
13838	do.....	do.....	Hornblende gneiss.....	(2)	181	.31	3.7	10.8	18.7	12
14114	Hockessin.....	do.....	do.....	(2)	194	.16	3.1	12.9	17.2	11
14025	Stoney Battery (near).....	do.....	Feldspathic schist.....	(2)	191	.25	3.6	11.1	17.7	10
11722	Wilmington.....	do.....	Hornblende quartzite.....	21,060	(2)	(2)	(2)	(2)	18.7	8
15367	do.....	do.....	Pyroxene quartzite.....	(2)	175	.69	3.3	12.1	18.7	12
15401	do.....	do.....	do.....	(2)	177	.18	3.3	12.1	18.7	13
13033	Yorklyn.....	do.....	Hornblende gneiss.....	(2)	173	.23	3.2	12.5	18.3	10

DISTRICT OF COLUMBIA.

19620	Washington, D. C.....		Mica gneiss.....	(2)	173	0.38	4.2	9.5	17.3	8
20320	do.....		do.....	(2)	176	.34	6.0	6.6	17.7	7

FLORIDA.

10192	Titusville.....	Brevard.....	Shell limestone.....	(2)	155	4.03	7.5	5.3	14.9	2
13788	Floral City.....	Citrus.....	Weathered chert.....	(2)	(2)	(2)	17.9	2.2	(2)	(2)
19248	Ojus.....	Dade.....	Shell limestone.....	(2)	(2)	(2)	21.0	1.9	(2)	(2)
19249	do.....	do.....	do.....	(2)	(2)	(2)	16.1	2.5	(2)	(2)
9739	Montbrook.....	Levy.....	Chert.....	(2)	156	2.02	3.2	12.3	(2)	(2)
9740	do.....	do.....	do.....	(2)	156	2.74	3.5	11.3	(2)	(2)
13568	do.....	do.....	do.....	(2)	148	4.22	15.6	2.0	17.3	16
10430	Boynton (near).....	Palm Beach.....	Shell limestone.....	(2)	(2)	(2)	37.2	1.1	(2)	(2)
10411	Delray (2 miles west of).....	do.....	do.....	(2)	(2)	(2)	50.9	.8	(2)	(2)
10431	Jupiter (50 miles west of).....	do.....	Siliceous limestone.....	(2)	(2)	(2)	12.5	3.2	14.7	5
18149	Live Oak.....	Stuwanee.....	Limestone.....	(2)	145	4.57	15.6	2.6	9.0	4
13301	Chipley.....	Washington.....	do.....	(2)	156	2.37	12.3	3.3	14.4	5

GEORGIA.

No.	Locality	Quartz schist ferruginous sandstone Dolomite Sandstone	Biotite gneiss Amphibolite Granite gneiss do. Biotite schist Biotite gneiss	Epidote hornblende schist. Mica schist. Biotite gneiss. Marble Serpentine marble Biotite granite Granite gneiss Biotite granite Biotite gneiss Biotite granite do. Biotite gneiss do. Granite gneiss. Hornblende gneiss	Feldspathic gneiss Hornblende gneiss Amphibolite Hornblende gneiss Biotite gneiss do. Magnesian quartzite Siliceous shell limestone		
10398	Cartersville (3 miles east).	159	0.71	5.0	8.0	19.3	(2)
10399	do.	145	1.45	22.0	1.8	(2)	11
12633	Cartersville (near).	171	1.02	3.9	10.2	16.0	(2)
12657	do.	173	.35	3.9	10.3	18.0	(2)
10400	Cass Station (2 miles north).	152	2.86	(3)	(2)	18.7	12
13845	Macon	168	1.20	5.9	60.8	18.0	8
10657	Bowdon (1 mile north).	187	1.20	19.0	2.1	10.5	4
10645	Carrollton (4 miles north).	172	.35	4.7	8.5	17.7	7
10646	Carrollton (near).	165	.62	4.5	8.9	17.7	5
10647	Carrollton (2 miles south-west).	169	.51	4.6	8.7	18.5	6
10648	Carrollton (near).	168	.53	4.8	8.3	18.7	4
10649	Carrollton (4 miles south-east).	168	.51	5.7	7.0	18.9	8
10654	Carrollton (7 miles north-east).	166	.67	(2)	(2)	18.0	10
10651	Mabry	192	1.12	5.5	7.3	17.7	9
10653	Roopville	168	.75	(2)	(2)	16.7	5
10655	Temple (4 miles east)	169	.56	7.7	5.2	17.0	5
11512	Hall Ground	169	.29	12.4	3.2	12.6	3
11529	Holly Springs	21, 850	.40	(2)	(2)	8.0	3
10417	Athens	178	.40	6.4	6.3	12.6	6
10418	do.	165	.68	6.4	6.3	18.7	6
10420	do.	169	.76	7.5	5.3	17.7	6
10421	Athens (south of)	167	.47	5.9	6.8	18.7	4
10422	Athens (4 miles west of)	167	.65	(2)	(2)	18.7	6
10423	Athens (4 miles from)	163	1.56	4.4	(2)	15.4	4
10837	Acworth (4 miles south)	163	.58	4.4	9.1	17.8	9
10838	Acworth (4 miles south of)	175	.68	8.6	4.7	16.7	9
10839	Ausell (3 miles west of)	174	.59	10.1	4.0	16.7	5
10893	Blackwells Station (1 mile north).	163	.56	7.4	5.4	18.7	5
10393	Chatahoochee River (near).	184	.42	4.9	8.2	17.3	7
10378	Kennesaw Mountain	165	.26	5.1	7.8	18.6	8
10381	Kennesaw Mountain (north of).	167	.73	(2)	(2)	18.7	6
10394	Kennesaw Station (4 miles northwest).	180	1.05	(2)	(2)	18.0	7
10395	Lost Mountain Store (near).	191	.46	5.3	7.5	15.3	5
10380	Marietta (4 miles north-west).	188	.93	(2)	(2)	13.3	4
10377	Marietta (4 miles north-west).	170	.67	6.5	6.2	17.3	6
10382	Smyrna (3½ miles west).	169	.50	5.6	7.1	17.3	6
10379	Lela	172	.84	(2)	(2)	18.0	7
9869	Dacula	125	2.51	22.2	1.8	19.3	5

Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

GEORGIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, per cent per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11204	Decatur (near).....	Dekalb.....	Biotite gneiss.....	(2)	162	.65	3.8	10.5	18.0	12
11205	Decatur.....	do.....	Granite.....	(2)	161	1.07	7.3	5.5	18.0	6
11206	Decatur (near).....	do.....	Biotite gneiss.....	(2)	168	.73	5.3	7.6	17.3	9
11940	Lithonia.....	do.....	Granite.....	(2)	163	.43	4.6	8.7	17.3	6
11941	do.....	do.....	do.....	21,280	165	.51	3.2	12.5	18.0	12
11942	do.....	do.....	do.....	15,325	163	.50	4.7	8.5	17.8	6
11943	do.....	do.....	do.....	17,830	163	.63	4.0	10.0	18.2	12
13302	do.....	do.....	do.....	(3)	166	.49	6.1	6.6	(3)	7
13353	do.....	do.....	do.....	(3)	164	.54	5.4	7.4	(3)	8
13944	do.....	do.....	do.....	27,250	164	.54	5.6	7.1	17.3	9
13940	do.....	do.....	Muscovite granite.....	17,695	163	.74	6.0	6.7	17.3	5
13941	do.....	do.....	Biotite granite.....	23,000	163	.59	5.6	7.1	18.0	9
19942	do.....	do.....	Muscovite granite.....	24,865	163	.40	5.6	7.1	17.7	7
20001	do.....	do.....	Granite.....	26,630	164	.54	4.4	9.1	18.7	7
20095	do.....	do.....	do.....	20,620	163	.54	5.5	7.3	17.7	7
20121	do.....	do.....	do.....	28,100	162	.78	4.2	9.5	18.3	8
20122	do.....	do.....	do.....	23,080	164	.51	4.7	8.5	18.3	5
do.....	do.....	do.....	do.....	24,300	163	.55	4.4	9.1	19.0	6
12078	Stone Mountain.....	do.....	do.....	11,220	164	.63	4.5	8.8	17.3	7
17641	Elberton.....	Elbert.....	Biotite granite.....	28,360	165	.38	3.6	11.1	18.7	12
19521	do.....	do.....	do.....	27,945	165	.03	4.1	9.8	18.7	9
10221	Armuchee (1 mile south-east).	Floyd.....	Crystalline limestone.....	(2)	168	.35	5.5	7.3	15.0	6
10222	Armuchee.....	do.....	Oolite limestone.....	(2)	168	.20	4.2	9.5	16.0	8
10223	Armuchee (near).....	do.....	Limestone.....	(2)	168	1.12	3.8	10.5	16.7	8
10224	Armuchee (southeast of).....	do.....	Argillaceous limestone.....	(2)	167	.59	4.0	10.0	17.3	16
10197	Beech Creek Bridge.....	do.....	Calcareous shale.....	(2)	163	2.14	(2)	(2)	10.7	8
10202	Dowzer Creek (near).....	do.....	Limestone.....	(2)	170	.44	5.1	7.8	15.7	4
10198	Huffaker Station.....	do.....	do.....	(2)	170	.22	3.6	11.1	16.0	4
10199	Lavender Mountain.....	do.....	Sandstone.....	(2)	163	1.47	(2)	(2)	17.7	29
10203	Pinson.....	do.....	Limestone.....	(2)	169	.22	4.9	8.2	15.3	5
10200	Rome (3 miles north).....	do.....	Argillaceous limestone.....	(2)	168	.21	5.1	7.8	15.7	12
10211	Rome.....	do.....	do.....	(2)	167	.85	5.6	7.1	14.7	13
9751	Atlanta (near).....	Fulton.....	Biotite granite.....	(2)	168	.82	3.7	10.8	18.3	8
9752	do.....	do.....	Granite gneiss.....	(2)	165	.53	(2)	(2)	18.7	9
9753	do.....	do.....	Gneissoid granite.....	(2)	168	.85	3.8	10.5	(2)	(2)
9754	do.....	do.....	Biotite gneiss.....	(2)	165	.94	8.4	4.8	17.3	7
9755	Atlanta.....	do.....	Mica gneiss.....	(2)	165	.38	3.9	13.3	18.7	10
9756	Atlanta (near).....	do.....	Granite gneiss.....	(2)	165	.30	4.3	9.3	18.7	7

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

GEORGIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10881	Columbus (east of).	Milton.	Granite gneiss.	(2)	165	.36	3.9	10.2	18.7	7
10860	Portston (2 miles south-east).	do.	Biottite granite.	(2)	168	.40	4.2	9.5	19.3	8
10861	Portston (4 miles south).	do.	Biottite gneiss.	(2)	167	.48	3.7	10.8	18.7	10
10862	Portston (1 mile south-west).	do.	do.	(2)	164	.89	5.3	7.6	18.7	9
10863	Gentian (3½ miles north-east).	do.	do.	(2)	163	.50	3.6	11.1	18.7	9
10865	do.	do.	Hornblende gneiss.	(2)	163	.58	3.7	10.8	18.7	10
11518	Marblehill.	Pickens.	Marble.	(2)	169	.09	13.7	2.5	11.3	2
11513	Fate.	do.	do.	(2)	169	.17	13.2	3.0	9.3	2
11514	do.	do.	do.	(2)	169	.33	12.0	3.3	10.3	2
11515	do.	do.	do.	(2)	169	.40	17.0	2.4	3.9	3
11516	do.	do.	do.	11,340	171	.37	10.6	(2)	10.3	2
11517	do.	do.	do.	8,735	169	.40	(2)	(2)	8.6	3
17757	do.	do.	do.	(2)	168	.47	12.5	3.2	11.3	3
15378	Talbotton (near).	Talbot.	Diabase.	(2)	187	.32	1.7	23.5	18.7	27

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10462	St. Anthony.	Fremont.	Basalt.	(2)	159	4.17	7.2	5.6	16.7	4
17329	Ellet.	Twin Falls.	Olivine basalt.	(2)	175	1.34	4.6	8.7	16.3	12

ILLINOIS.

15938	Olve Branch.	Alexander.	Chert.	(2)	148	1.97	9.7	4.1	(2)	(2)
18739	Irondale.	Cook.	Slag.	(2)	126	1.17	19.9	2.0	(2)	(2)
11224	McCook.	do.	Dolomite.	(2)	158	2.33	6.0	6.7	(2)	(2)
11226	Thornion.	do.	do.	(2)	157	2.43	6.8	6.9	(2)	(2)
11872	do.	do.	Argillaceous dolomite.	(2)	162	2.27	5.5	7.3	13.6	6
14426	South Chicago.	do.	Slag.	(2)	141	3.48	9.1	4.4	14.3	7
16039	(1)	do.	Dolomite.	(2)	159	3.12	4.5	8.9	14.0	12
12236	Whitehill Quarry.	Johnson.	Siliceous limestone.	(2)	495	.54	4.9	8.2	14.7	(2)
9750	Aurora.	Kane.	Smelter slag.	(2)	221	.17	2.2	18.2	(2)	(2)

10387	Kankakee.....	Kankakee.....	Dolomite.....	11, 180	158	2.12	8.4	4.8	16.0	5
11790	Lehigh.....	do.....	Argillaceous dolomite.....	(2)	157	3.08	7.0	5.7	14.3	7
13237	do.....	do.....	Dolomite.....	(2)	162	2.60	4.6	8.7	12.7	7
10208	Fox Township.....	Kendall.....	do.....	(2)	169	1.67	4.9	8.2	13.3	8
11133	Coniac.....	Livingston.....	Argillaceous limestone.....	(2)	156	2.73	12.9	3.1	(2)	(2)
11780	Alton.....	Madison.....	Limestone.....	(2)	166	.93	5.9	6.8	12.7	4
14949	(1).....	do.....	Fossiliferous limestone.....	(2)	166	1.19	6.0	6.7	18.3	10
19451	Cobden.....	Union.....	Argillaceous limestone.....	35, 320	167	.37	3.5	11.4	16.3	9
20002	do.....	do.....	Limestone.....	22, 570	168	.27	4.0	10.0	16.0	10
10772	Aurora (near).....	Will.....	Smelter slag.....	(2)	212	.00	7.3	5.5	18.7	7
9827	Joliet.....	do.....	Dolomite.....	(2)	168	1.18	4.9	8.2	15.1	8
18861	do.....	do.....	Slag.....	(2)	149	2.54	10.1	4.0	(2)	(2)

INDIANA.

15352	Henryville.....	Clark.....	Dolomitic limestone.....	(2)	177	1.06	3.5	11.4	17.0	13
9688	(1).....	do.....	Argillaceous dolomite.....	(2)	150	5.23	10.3	3.9	.0	3
11082	Brazil.....	Clay.....	Limestone.....	(2)	174	.66	4.3	9.3	17.3	11
11018	Milltown.....	Crawford.....	do.....	(2)	167	.56	3.3	12.1	16.3	11
11019	do.....	do.....	do.....	(2)	168	.66	3.6	11.1	15.0	7
11020	do.....	do.....	do.....	(2)	167	.60	3.5	11.4	15.3	11
11021	do.....	do.....	Argillaceous limestone.....	(2)	168	1.17	3.0	13.3	15.3	11
11022	do.....	do.....	Limestone.....	(2)	168	.37	4.5	8.9	16.7	6
11023	do.....	do.....	do.....	(2)	168	.61	4.4	9.1	15.7	7
11024	do.....	do.....	Pisolithic limestone.....	(2)	158	2.78	5.2	7.7	8.7	4
11025	do.....	do.....	Limestone.....	(2)	161	2.39	4.5	8.9	14.7	8
9839	St. Paul.....	Decatur.....	Argillaceous limestone.....	(2)	168	2.01	4.4	9.1	14.0	5
10114	do.....	do.....	do.....	(2)	168	1.01	4.0	10.0	13.3	5
11778	do.....	do.....	Limestone.....	(2)	166	1.62	4.7	8.5	12.3	6
14871	Eaton.....	Delaware.....	Dolomite.....	(2)	169	1.43	5.8	6.9	15.7	6
11066	Schellville.....	Dubois.....	Siliceous limestone.....	(2)	169	2.58	3.8	7.5	15.3	12
19578	St. Anthony.....	do.....	Sandstone.....	11, 250	135	5.82	10.2	3.9	6.7	4
19579	do.....	do.....	do.....	11, 980	139	6.77	10.7	3.7	10.7	4
16723	New Paris.....	Elkhart.....	Argillaceous limestone.....	(2)	166	.12	4.0	10.0	12.0	9
15374	Floyds Knobs.....	Floyd.....	Limestone.....	(2)	164	2.43	4.7	8.5	13.3	6
15375	do.....	do.....	Feldspathic sandstone.....	(2)	132	9.64	11.8	3.4	3.7	4
15376	do.....	do.....	do.....	(2)	134	9.75	10.9	3.7	.0	3
11183	Huntington.....	do.....	Dolomite.....	25, 420	163	2.10	4.10	9.7	14.0	7
17944	do.....	Huntington.....	Argillaceous dolomite.....	(2)	161	5.78	7.1	5.6	(2)	(2)
9811	Vernon.....	do.....	Dolomite.....	(2)	159	4.30	5.0	8.0	15.3	9
10834	do.....	Jennings.....	do.....	(2)	167	2.08	3.9	10.2	15.3	9
10847	do.....	do.....	Limestone.....	(2)	149	6.90	8.1	4.9	12.0	4
11235	do.....	do.....	Argillaceous dolomite.....	24, 150	162	3.67	4.8	8.3	12.3	6
11236	do.....	do.....	Dolomite.....	27, 490	164	1.45	5.7	7.0	14.7	11
11237	do.....	do.....	Limestone.....	15, 330	166	1.00	4.5	8.9	13.3	6
11238	do.....	do.....	Argillaceous limestone.....	14, 840	141	2.27	10.9	3.6	8.0	5
12889	Bedford.....	Lawrence.....	Limestone.....	(2)	143	7.75	(2)	(2)	.0	5

* Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

INDIANA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10256	Bloomington (east of)	Monroe.	Limestone.	(2)	(2)	(2)	(2)	(2)	12.0	4
10257	do.	do.	Argillaceous limestone.	(2)	(2)	(2)	(2)	(2)	14.6	5
10493	do.	do.	Limestone.	(2)	185	1.03	4.8	8.3	14.7	7
9860	Greencastle.	Putnam.	do.	(2)	168	.66	(2)	(2)	16.7	5
11818	do.	do.	do.	(2)	167	.66	(2)	(2)	16.7	5
10727	do.	do.	do.	(2)	160	1.07	6.9	5.8	13.3	3
10519	Fillmore.	do.	Argillaceous limestone.	(2)	159	2.22	7.3	5.5	9.0	6
10320	do.	do.	do.	(2)	162	2.00	(2)	(2)	11.2	6
10020	Elberfeld.	Warrick.	Limestone.	(2)	139	3.81	4.5	8.9	12.0	9
9885	Bluffton.	Wells.	Dolomite.	(2)	165	2.89	6.2	6.5	15.3	8
14730	Monon.	White.	do.	(2)	170	.41	5.6	7.1	15.7	7
10693	(1)	(1)	Limestone.	(2)	166	1.24	5.4	7.5	13.5	5
10694	(1)	(1)	Argillaceous limestone.	(2)	148	8.75	8.9	4.5	.0	3

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13913	Brandon.	Black Hawk.	Limestone.	(2)	161	0.36	4.7	8.5	15.0	4
11783	Dubuque.	Dubuque.	Argillaceous dolomite.	(2)	169	1.55	3.7	7.1	15.0	7
13903	Stone City.	Jones.	Dolomite.	(2)	132	11.81	14.5	2.7	0.0	4
11614	Council Bluffs (near).	Mills.	Limestone.	(2)	166	.43	5.4	7.4	15.7	6
15961	(1)	Story.	Dolomite.	(2)	(2)	(2)	6.4	6.3	(2)	2
15962	(1)	do.	Limestone.	(2)	(2)	(2)	3.4	11.8	(2)	(2)

KANSAS.

9599	Fort Scott (7 miles west of).	Bourbon.	Limestone breccia.	7,380	147	5.11	12.5	3.2	5.0	3
15939	Sedalia.	Chautauqua.	Argillaceous limestone.	(2)	155	3.64	9.2	4.4	8.7	4
11683	Lawrence.	Douglas.	do.	(2)	154	4.40	10.7	3.7	14.7	6
11684	do.	do.	do.	(2)	152	3.97	7.6	5.3	4.0	4
11687	Lawrence (near).	do.	do.	(2)	158	2.40	6.1	6.6	8.7	4
11689	Leecompton.	do.	Cherty limestone.	(2)	157	1.01	9.3	4.3	12.0	5
11681	Junction City.	Geary.	Argillaceous limestone.	(2)	119	12.30	31.8	1.3	.0	3
11682	do.	do.	Cherty limestone.	(2)	134	10.22	13.0	3.1	14.0	2

11695	do.....	Geary.....	Argillaceous limestone.....	(2)	149	5.44	13.7	2.9	(2)	7
11696	do.....	do.....	do.....	(2)	164	1.51	5.7	7.0	14.3	5
11696	Tonganoxie.....	Leavenworth.....	do.....	(2)	156	2.91	7.6	5.3	11.3	5
11692	Neeley.....	do.....	Limestone.....	(2)	155	2.60	8.3	4.8	15.7	6
9780	Beloit.....	Mitchell.....	Argillaceous limestone.....	(2)	143	6.71	18.2	2.2	4.3	4
11694	Council Grove.....	Morris.....	Chert.....	(2)	153	2.45	4.6	8.7	(2)	(2)
11693	Council Grove (near).....	do.....	do.....	(2)	153	3.67	9.1	4.4	11.7	3
11677	Helmick.....	do.....	Argillaceous limestone.....	(2)	132	8.85	11.5	3.5	16.7	2
11678	do.....	do.....	do.....	(2)	122	9.19	30.1	1.3	2.7	3
11679	do.....	do.....	do.....	(2)	143	6.59	15.0	2.7	0	3
11680	do.....	do.....	do.....	(2)	134	9.25	19.5	2.1	0	3
14882	Woodruff (2½ miles west of).....	Phillips.....	Sandstone.....	(2)	144	1.77	5.7	7.0	18.7	7
14711	(1).....	Riley.....	Dolomite.....	(2)	174	2.20	4.0	10.0	15.3	10
11675	Levis.....	Shavnee.....	Limestone.....	(2)	156	1.35	5.1	7.8	13.3	8
11688	do.....	do.....	do.....	(2)	156	3.14	7.7	5.2	16.5	6
11685	Topoka.....	do.....	Argillaceous limestone.....	(2)	152	4.72	8.7	4.6	10.3	6
11680	do.....	do.....	do.....	(2)	151	4.99	7.7	5.2	12.0	5
11691	do.....	do.....	do.....	(2)	144	7.76	7.2	3.6	13.3	3
11697	do.....	do.....	do.....	(2)	160	2.52	6.7	6.0	13.0	6

KENTUCKY.

16746	Jackson.....	Breathitt.....	Feldspathic sandstone.....	(2)	153	4.62	8.6	4.7	0.0	5
13343	Princeton (near).....	Caldwell.....	Cherty limestone.....	(2)	164	.48	4.5	8.9	16.7	8
16192	do.....	do.....	Limestone.....	(2)	167	.47	6.0	6.7	(2)	(2)
12754	Grayson (near).....	Carver.....	Argillaceous limestone.....	(2)	167	.18	5.1	7.8	15.0	11
17060	Olive Hill.....	do.....	Limestone.....	(2)	169	.15	17.6	7.8	15.3	6
17075	do.....	do.....	Ferruginous sandstone.....	(2)	(2)	(2)	(2)	2.3	(2)	(2)
17093	do.....	do.....	Limestone.....	(2)	167	.61	4.5	8.9	15.3	8
17138	do.....	do.....	do.....	(2)	167	.65	4.9	8.2	14.0	6
10134	Lexington.....	Fayette.....	Argillaceous limestone.....	(2)	168	.19	6.1	6.6	16.0	4
10136	do.....	do.....	do.....	(2)	168	.17	5.5	7.3	12.7	4
16637	Nicholasville.....	Jessamine.....	do.....	(2)	171	1.14	7.0	5.7	(2)	6
17257	do.....	do.....	Limestone.....	(2)	167	1.15	5.3	7.6	14.0	5
17061	East Bernstadt.....	Laurel.....	Feldspathic sandstone.....	(2)	143	4.62	9.9	4.0	.0	4
16778	Bradenburg.....	Meade.....	Argillaceous limestone.....	(2)	169	7.34	9.5	4.2	.7	4
17011	Harrodsburg.....	Mercer.....	Crystalline limestone.....	(2)	169	.28	8.1	4.9	8.0	4
17658	do.....	do.....	Limestone.....	(2)	169	.20	6.0	6.7	16.7	5
17073	Livingston.....	Rockcastle.....	Siliceous dolomite.....	(2)	170	11.8	11.8	11.8	13.0	13
19599	Morehead.....	Rowan.....	Feldspathic sandstone.....	(2)	147	2.20	3.4	7.4	3.3	7
16313	(1).....	do.....	Calcareous sandstone.....	(2)	147	5.09	5.4	6.9	(2)	11
16416	Elkton.....	Todd.....	Limestone.....	(2)	163	.63	5.8	7.7	(2)	7
10451	Cerulean Springs (near).....	Trigg.....	Argillaceous limestone.....	(2)	167	.45	5.2	8.5	14.2	6
9829	(1).....	(1).....	Limestone.....	(2)	165	1.31	4.7	(2)	13.7	6
9830	(1).....	(1).....	Argillaceous limestone.....	(2)	165	.82	(2)	(2)	15.5	10

1 Exact locality not known.

2 Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11241 18145 20627	New Orleans. Florien. (1).	Orleans. Sabine. (1).	Argillaceous sandstone. Sandstone. Granite.	(2) (4) 28,810	128 135 163	11.35 6.29 .47	19.1 7.0 4.0	2.1 5.7 10.0	14.7 16.3 19.3	6 9 8
MAINE.										
11433 12755 12756 10219 11416 12283 9997 10233 10234 1	Auburn. Portland. do. North Jay. do. do. Mount Desert. do. do. Exact locality not known.	Androscoggin. Cumberland. do. Franklin. do. do. Hancock. do. do. do.	Biotite gneiss. Sericite schist. Granite. do. Biotite granite. Granite. do. do. do. do.	(2) (2) (2) 21,260 25,090 (2) 19,780 19,220 24,700 (2) (2)	170 170 166 164 (2) 163 165 162 160	0.58 .18 .24 .84 (2) .69 .21 .90 .67	4.4 4.1 3.8 2.7 (2) 4.4 3.4 4.1 3.2	9.1 9.8 10.5 14.8 (2) 9.1 11.8 9.8 12.5	18.0 17.3 18.0 19.3 17.3 19.0 19.7 18.7 18.7	8 14 10 7 7 9 9 8 12
2 16304 10988 10989 17439 13862 11327 11486 11408 11468 11215 17022 17023 17024 9996 10249 10250 13868 13869 9706	do. do. Ship Harbor. do. do. Swans Island. (1). Hallowell. do. do. Litchfield. Winslow. Camden. Clark Island. do. do. Long Cove. do. 									

11411	Rockport.....	do.	Granite.....	31,580	(2)	(2)	(2)	18.0	8
9781	St. George.....	do.	do.	18,780	(2)	(2)	(2)	(2)	12
9885	do.	do.	do.	17,150	(2)	(2)	(2)	18.8	9
11418	do.	do.	Biotite granite.....	25,180	(2)	(2)	(2)	18.0	10
19144	do.	do.	do.	do.	165	57	12.9	19.0	13
10019	Vinal Haven.....	do.	do.	21,650	(2)	25	3.1	12.9	14
11414	do.	do.	do.	32,090	(2)	(2)	(2)	19.3	11
13854	do.	do.	Granite.....	33,485	(2)	43	3.3	18.7	13
19212	do.	do.	Biotite granite.....	do.	(2)	(2)	3.4	11.8	14
13855	do.	do.	do.	do.	(2)	(2)	3.5	11.4	14
13866	State Point.....	do.	Biotite gneiss.....	do.	165	89	9.5	4.2	3
11406	Bowdoinham.....	do.	Gneissoid granite.....	do.	159	1.63	7.1	5.6	(2)
11491	do.	do.	Biotite gneiss.....	do.	163	1.74	12.4	3.2	(2)
11422	do.	do.	do.	do.	163	1.79	11.4	3.5	5
11404	Richmond.....	do.	Granite.....	do.	163	1.76	4.1	18.0	3
11405	do.	do.	Biotite gneiss.....	do.	170	1.41	8.4	17.3	(2)
11407	do.	do.	do.	do.	do.	do.	do.	do.	(2)

MARYLAND.

16850	Ashland.....	Baltimore.....	Blast furnace slag.....	(2)	162	2.04	6.7	(2)	6
16851	do.	do.	do.	(2)	138	9.91	19.0	15.3	6
16852	do.	do.	do.	(2)	196	3.52	6.5	(2)	(2)
16853	do.	do.	do.	(2)	175	.57	4.6	8.7	(2)
14167	Baltimore.....	do.	Copper blast furnace slag.....	(2)	203	.97	3.5	7.3	13
14179	do.	do.	do.	(2)	205	.95	3.2	15.3	11
14193	do.	do.	do.	(2)	199	.72	3.1	12.9	(2)
20319	do.	do.	Feldspathic quartzite.....	(2)	169	.21	7.7	18.7	12
11556	Bare Hills.....	Baltimore.....	Serpentine rock.....	(2)	161	1.02	5.2	12.3	5
20558	Butler.....	do.	Muscovite gneiss.....	(2)	168	.56	5.1	18.7	8
19028	Cockeysville (near).....	do.	Marble.....	(2)	163	.19	5.6	14.0	6
11335	Raspeburg.....	do.	Hornblende schist.....	(2)	186	.41	3.5	17.3	15
11336	do.	do.	Hornblende gneiss.....	(2)	165	.89	6.7	15.0	7
20116	Sparks.....	do.	Biotite gneiss.....	(2)	169	1.24	6.9	18.3	5
20167	do.	do.	Biotite granite.....	(2)	170	1.26	8.4	17.0	6
18639	Texas.....	do.	Marble.....	(2)	172	.38	7.6	14.0	4
14646	Towson.....	do.	do.	(2)	175	.21	4.2	11.0	6
19508	do.	do.	Micaeous marble.....	(2)	175	.21	4.2	16.0	8
20114	do.	do.	Gneissoid marble.....	(2)	165	.57	4.9	19.3	10
15387	do.	do.	Marble.....	(2)	172	.30	5.4	7.4	17
12802	Port Deposit.....	Cecil.....	Hornblende biotite schist.....	(2)	169	.01	2.8	17.3	9
20318	do.	do.	Biotite gneiss.....	(2)	163	.57	(2)	18.3	10
15161	Sylmar-Rising Sun.....	Frederick.....	Hypersthene granite.....	(2)	183	2.02	(2)	18.0	11
10105	Frederick.....	do.	Limestone.....	(2)	169	.25	3.0	16.7	5
16196	do.	do.	Siliceous limestone.....	(2)	172	.14	2.6	15.4	11
12930	Lime Kill.....	do.	Argillaceous limestone.....	(2)	170	.11	4.1	9.8	6
19692	do.	do.	do.	(2)	180	.18	2.6	15.0	19
12360	Belair (near).....	Harford.....	Altered gabbro.....	(2)	190	.17	2.8	18.7	21
14348	do.	do.	Amphibolite.....	(2)	do.	do.	do.	do.	do.

1 Exact locality not known.

2 Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

MARYLAND—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
20191	Havre de Grace.	Harford.	Hornblende schist.	(2)	185	.18	2.9	13.8	17.7	10
13669	Kingsville (near).	do.	Amphibolite.	(2)	191	.41	4.0	10.0	17.3	10
10021	North Laurel.	Howard.	do.	(2)	200	.46	3.5	11.4	17.7	8
20316	Savage.	do.	do.	(2)	190	.48	(2)	(2)	17.7	14
20388	do.	do.	do.	(2)	190	.23	1.5	26.7	19.3	30
17458	(1)	do.	Hornblende gneiss.	(2)	167	.78	4.6	8.7	17.3	8
12607	Bethesda (near).	Montgomery	Mica gneiss.	(2)	168	.33	3.4	11.8	18.7	9
10101	Dickerson.	do.	Diabase.	(2)	(2)	(2)	1.4	28.6	18.5	21
12766	do.	do.	do.	(2)	181	.12	2.6	15.4	(2)	(2)
14264	do.	do.	do.	(2)	187	.24	(2)	(2)	18.7	20
11152	Halpine.	do.	Epidote hornblende gneiss.	(2)	198	.65	3.1	12.9	16.0	11
11153	do.	do.	Biotite granite.	(2)	171	.42	3.1	12.9	18.7	13
13728	do.	do.	Diabase.	(2)	(2)	(2)	1.6	25.0	(2)	(2)
11342	Cavetown.	Prince Georges.	Marble.	(2)	171	.29	3.6	11.1	16.0	9
14424	Weverton.	Washington.	Quartzite.	(2)	167	.31	3.1	12.9	(2)	(2)

MASSACHUSETTS.

10016	Great Barrington.	Berkshire.	Marble.	(2)	175	0.37	5.6	7.1	15.3	4
11508	Lee.	do.	Dolomite marble.	(2)	179	.31	7.2	5.6	11.2	2
10258	Otis.	do.	Granite.	(2)	166	.71	2.6	15.4	18.0	9
15457	Pittsfield (west).	do.	Marble.	18, 260	172	.65	5.1	7.8	13.3	7
12473	Windser.	do.	Quartzite.	(2)	164	.24	3.9	10.3	18.7	12
11017	Acushnet.	Bristol	Chlorite gneiss.	(2)	167	.44	2.4	16.6	19.0	17
9770	Fall River.	do.	Biotite gneiss.	(2)	178	.27	2.7	14.8	18.2	17
10247	Seekonk.	do.	Feldspathic sandstone.	(2)	167	.76	4.0	10.0	18.7	12
15178	do.	do.	do.	(2)	165	1.21	4.3	9.3	18.7	14
15179	do.	do.	Siliceous slate.	(2)	164	1.84	3.9	10.3	(2)	(2)
11413	Beverly.	Essex.	Hornblende granite.	28, 580	(2)	(2)	(2)	(2)	19.3	9
12293-A	do.	do.	Biotite syenite.	(2)	181	.87	(2)	(2)	17.0	24
12293-B	do.	do.	Hornblende granite.	(2)	186	.35	(2)	(2)	19.0	15
20878	Danvers.	do.	Diorite.	(2)	186	.35	2.8	14.3	18.3	10
9649	Gloucester.	do.	Granite.	19, 580	165	.32	3.7	10.8	19.7	10
9650	do.	do.	do.	18, 125	165	.35	4.4	9.1	19.7	10
19958	Essex.	do.	do.	(2)	163	.51	4.8	8.3	18.7	8

2 Test not made.

2 Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

MASSACHUSETTS—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13885	Westford.....	Middlesex	Granite.....	(2)	(2)	(2)	4.6	8.7	18.0	9
13894	do.....	do.	do.....	(2)	(2)	(2)	3.1	12.9	19.3	9
19685	Weston.....	do.	Altered diabase.....	(2)	180	20	3.1	12.9	18.3	12
12324	West Townsend.....	do.	Granite.....	(2)	162	1.14	7.4	5.4	18.7	8
12852	do.....	do.	Biotite granite.....	(2)	163	26	6.9	5.8	17.3	6
13148	do.....	do.	Granite.....	25,500	(2)	(2)	(2)	(2)	18.0	10
17198	Winchester.....	do.	Hornblende gabbro.....	(2)	189	20	3.0	13.3	18.0	13
19390	Woburn.....	do.	Olivine diabase.....	(2)	190	45	2.7	14.8	18.7	31
12063-A	Brookline.....	Norfolk	Altered andesite.....	(2)	4174	4.32	4.20	420.0	18.0	22
12063-B	do.....	do.	do.....	(2)	4174	4.32	4.20	420.0	18.7	(2)
12063-C	do.....	do.	do.....	(2)	4174	4.32	4.20	420.0	18.7	(2)
12063-D	do.....	do.	do.....	(2)	4174	4.32	4.20	420.0	18.7	(2)
12105	Quincy.....	do.	Slate.....	(2)	168	63	4.7	9.3	13.3	18
13562-A	do.....	do.	Granite porphyry.....	(2)	166	41	4.7	14.8	18.0	11
13562-B	do.....	do.	Altered slate.....	(2)	175	16	4.7	14.8	18.0	17
13562-C	do.....	do.	Granite.....	(2)	164	40	4.7	14.8	18.7	11
13562-D	do.....	do.	do.....	(2)	163	35	4.7	14.8	18.0	9
14652	do.....	do.	Altered granite.....	(2)	163	91	5.3	7.6	18.7	(2)
14897	Randolph.....	do.	Feldspathic quartzite.....	(2)	163	91	3.3	12.1	18.7	10
15292	Hingham.....	Plymouth	Aplite granite.....	(2)	130	42	2.7	14.8	18.3	18
11991-A	Boston.....	Suffolk	Feldspathic sandstone.....	(2)	366	75	3.7	5.6	18.7	13
11991-B	do.....	do.	do.....	(2)	366	75	3.7	5.6	8.3	4
12050	do.....	do.	Altered rhyolite.....	(2)	168	43	5.8	6.9	18.7	7
12051	do.....	do.	Altered trachyte.....	(2)	175	17	5.5	7.2	18.7	(2)
12056	do.....	do.	Rhyolite breccia.....	(2)	167	18	5.9	6.8	18.7	(2)
12069-A	do.....	do.	Altered rhyolite.....	(2)	466	4.23	4.32	412.5	19.0	25
12069-B	do.....	do.	do.....	(2)	466	4.23	4.32	412.5	18.7	(2)
12069-C	do.....	do.	do.....	(2)	466	4.23	4.32	412.5	18.3	(2)
13559	do.....	do.	Rhyolite breccia.....	(2)	166	71	4.4	9.1	18.7	8
13561	do.....	do.	Conglomerate.....	(2)	160	63	5.0	8.0	18.0	7
13564	do.....	do.	Altered granite.....	(2)	168	18	3.4	11.8	18.7	10
13565	do.....	do.	Diorite.....	(2)	182	25	2.8	14.3	18.0	13
13567	do.....	do.	Altered rhyolite.....	(2)	172	39	4.4	9.1	17.3	11
14017	do.....	do.	Altered diabase.....	(2)	192	19	1.8	22.2	18.7	24
15164	do.....	do.	Granite.....	(2)	167	25	4.3	10.8	18.7	10
18910	do.....	do.	Altered diabase.....	(2)	192	62	2.2	18.2	18.0	18
18911	do.....	do.	Rhyolite breccia.....	(2)	165	69	3.7	10.8	19.3	10
18912	do.....	do.	Altered andesite.....	(2)	178	37	3.0	13.3	18.3	10
18912	do.....	do.	Rhyolite breccia.....	(2)	167	43	5.0	8.0	17.7	8

18913	do.	do.	do.	do.	165	45	2.5	16.0	17.3	12
18914	do.	do.	do.	Altered rhyolite.	180	.38	4.2	9.5	18.7	12
18915	do.	do.	do.	Volcanic conglomerate.	165	.71	4.8	8.3	17.3	8
18916	do.	do.	do.	do.	166	.53	6.6	6.1	(2)	(2)
18917	do.	do.	do.	Quartz syenite.	165	.35	3.5	11.4	18.7	11
18918	do.	do.	do.	Altered diabase.	191	.17	2.1	19.1	18.7	29
18919	do.	do.	do.	Altered rhyolite.	162	1.22	4.3	9.3	18.7	25
18920	do.	do.	do.	do.	166	.58	2.7	14.8	19.0	17
18921	do.	do.	do.	Altered dacite.	165	.21	4.1	9.8	11.7	(2)
19225	do.	do.	do.	Conglomerate.	164	.98	7.5	5.3	(2)	(2)
19226	do.	do.	do.	Granite.	163	.54	4.0	10.0	18.3	10
19227	do.	do.	do.	Altered rhyolite.	164	.38	3.2	12.5	19.3	12
19736	do.	do.	do.	Conglomerate.	167	.48	4.5	8.9	17.7	28
19835	Fayette.	do.	do.	Granite gneiss.	162	.75	3.0	13.3	18.7	11
19836	Fitchburg.	do.	do.	Biotite granite.	166	.79	5.7	7.0	17.9	7
17503	Southbridge.	do.	do.	Biotite schist.	172	.62	4.3	9.3	16.3	11
10889	West Rutland.	do.	do.	Granite.	164	.16	2.9	13.8	18.6	12
10000	do.	do.	do.	do.	161	.10	6.7	6.0	18.0	7
10091	do.	do.	do.	Biotite gneiss.	163	.89	6.5	6.2	18.0	9
18741	Whitins.	do.	do.	Gneissoid granite.	164	.29	(3)	(2)	18.7	8
18742	do.	do.	do.	do.	164	.54	(3)	(2)	13.3	6

MICHIGAN.

20371	Potoskey.	Emmett.	Argillaceous limestone.	175	1.30	5.9	6.8	13.3	7
20372	do.	do.	do.	164	1.31	3.3	7.6	13.7	6
20373	do.	do.	do.	165	.94	6.3	6.4	16.3	3
20374	do.	do.	do.	165	.75	4.9	8.2	14.0	9
9855	Marquette.	do.	do.	184	.62	(2)	(2)	19.3	25
9856	do.	do.	Hornblende gneiss.	184	.66	(2)	(2)	18.7	25
9857	do.	do.	Altered diabase.	181	.57	(2)	(2)	18.0	17
9975	do.	do.	Amphibolite.	181	.52	2.1	19.1	19.3	12
9976	do.	do.	Altered diabase.	175	.42	3.8	10.5	16.0	13
9977	do.	do.	do.	184	.60	3.1	12.9	18.3	11
9977	do.	do.	do.	184	.60	3.1	12.9	18.3	11
11223	Dundee.	do.	do.	156	1.32	9.0	4.4	17.0	4
9989	Monroe.	do.	Limestone.	175	.64	3.6	11.1	17.0	16
9988	do.	do.	Dolomite.	165	3.03	4.2	9.5	(2)	5
9989	do.	do.	Argillaceous dolomite.	175	1.47	4.7	8.5	13.5	15
10011	do.	do.	do.	172	1.80	3.6	11.1	17.0	17
15771	Schoolcraft.	do.	Dolomite.	163	2.26	5.2	7.7	13.3	7
14623	Culicite.	do.	do.	157	1.88	6.9	5.6	5.9	4
14623	Rogers.	do.	Limestone.	162	1.30	9.5	4.3	13.3	5
14639	Inwood.	do.	Dolomite marble.	177	.46	4.8	8.3	16.0	8
18864	Detroit.	Wayne.	Slag.	119	5.63	18.3	2.2	(2)	(2)
9888	Sibley.	do.	Limestone	159	2.82	12.4	3.2	15.3	6

* Test not made.

* Test made on mixtures of "A" and "B."

* Test made on mixtures of "A," "B," "C," and "D."

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

MINNESOTA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
11703	Sauk Rapids.....	Benton.....	Biotite granite.....	(2)	105	0.35	4.0	10.0	19.0	9
11704	do.....	do.....	do.....	(2)	163	.48	7.0	5.7	18.7	7
11705	do.....	do.....	do.....	(2)	169	.32	3.2	12.5	18.7	8
11341	Mankato.....	Blue Earth.....	Hornblende granite.....	(2)	156	4.80	6.4	6.3	5.3	2
10485	Jasper.....	Rock.....	Calcareous sandstone.....	(3)	164	.18	2.0	20.0	19.7	17
14495	(1).....	do.....	Quartzite.....	(3)	168	.48	2.4	16.7	(3)	(3)
15244	(1).....	do.....	do.....	(3)	218	.48	2.6	15.4	18.7	20
15244	Mesa (near).....	St. Louis.....	Epidiorite.....	(3)	187	.24	3.8	10.6	18.7	18
13725	(1).....	(1).....	Sandstone.....	(3)						

MISSISSIPPI.

10287	(1).....	Holmes.....	Sandstone.....	(2)	144	4.70	7.8	5.1	18.0	8
16131	Chunky.....	Newton.....	do.....	(2)	124	8.96	9.8	4.1	3.3	5
12692	Pontotoc.....	Pontotoc.....	Slipaceous limestone.....	(2)	160	.92	7.0	5.7	17.0	9
11791	Brandon.....	Rankin.....	Argillaceous limestone.....	(2)	156	3.08	5.6	7.2	12.0	5
14293	Juka (near).....	Tishomingo.....	Weathered chert.....	(2)	127	7.89	12.2	3.3	(2)	(2)
10098	New Albany.....	Union.....	Sandstone.....	(2)	156	2.58	11.1	3.6	18.7	7

MISSOURI.

11510	Cassville.....	Barry.....	Marble.....	(2)	109	0.70	5.7	7.0	11.7	3
15444	Cape Girardeau.....	Cape Girardeau.....	Limestone.....	(2)	168	.37	4.3	9.3	17.0	5
10169	West Line.....	Cass.....	do.....	16,690	156	1.09	11.5	3.5	13.5	5
10410	(1).....	do.....	do.....	(2)	167	.63	5.6	7.2	14.7	6
19634	Iron.....	do.....	Porphry.....	(2)	205	.46	5.4	7.4	18.0	9
20302	do.....	do.....	Fragmental hematite.....	(2)	201	.25	2.4	16.7	18.3	16
15099	Kansas City.....	Jackson.....	Marble.....	(2)	165	.66	7.5	5.3	8.3	2
14731	do.....	do.....	Limestone.....	(2)	164	.74	5.5	7.3	13.3	5
14448	Webb City (near).....	Jasper.....	Chert.....	(2)	155	2.96	4.4	9.1	19.7	(2)
20063	Prosperity.....	do.....	do.....	(2)	162	.30	5.5	7.3	19.3	4
10251	Hamburg.....	St. Charles.....	Limestone.....	(2)	167	.63	5.2	7.7	12.3	3
10252	do.....	do.....	do.....	(2)	164	.90	7.3	5.5	10.7	3
11743	University City.....	St. Louis.....	do.....	(2)	158	3.81	5.2	7.7	14.6	7
11789	Digns.....	do.....	do.....	(3)	163	2.10	6.7	5.9	16.0	5
10237	(1).....	do.....	do.....	(3)	167	.73	4.0	10.0	16.0	7
10238	(1).....	do.....	do.....	(3)	167	.75	5.1	7.9	15.3	5

MONTANA.

15898	(1)	Deer Lodge.	Quartzite.	162	1.10	5.6	7.1	(2)
16155		Anaconda.	do.	163	.34	4.3	9.3	(2)
14363		Logan.	Limestone.	169	.76	3.4	11.8	(2)
14466		Tribent.	do.	166	.72	6.8	5.9	(2)
14467		do.	do.	164	1.43	3.4	7.8	(2)
		do.	Siliceous limestone.	162	1.03	5.9	6.8	17.0
15955		East Helena.	Smelter slag.	212	1.78	4.6	8.7	12
14360		Livingston (near).	Basalt.	178	1.95	23.8	16.7	10
15899	(1)	Wibaux.	Burnt shale.	122	13.77	1.7	1.7	(2)
13897		Billings.	Sandstone.	135	9.27	26.3	1.5	7

NEBRASKA.

Locality	Section	Thickness (feet)	Number of specimens	Number of sections	Number of sections	Number of sections	Number of sections
Louisville	Cass	16980	163	2.44	5.8	6.9	14.7
16981	do.	1390	130	23.50	18.2	27.7	6
18831	Louisville (near)	160	3.02	4.6	6.2	11.3	3
18832	Louisville	163	2.02	6.2	6.5	12.0	6
18833	do.	164	1.82	4.9	8.2	12.7	6
18834	do.	163	1.82	4.9	8.2	12.7	6
Nebawka	do.	165	1.75	4.7	8.5	16.0	7
14581	Cherty limestone	163	1.27	4.8	8.3	15.0	6
14582	Siliceous limestone	162	2.65	6.7	6.0	13.3	5

NEW HAMPSHIRE.

11339	Redstone.	Carroll.	Biotite granite.	21,910	161	0.61	5.7	7.0	18.0
12229	do.	do.	Granite	(2)	162		6.5	6.2	18.0
9895	Fitzwilliam.	Cheshire.	do.	10,825	165	.33	3.8	10.5	18.7
9846	do.	do.	do.	26,100	165	.32	3.7	10.8	18.7
9893	do.	do.	do.	15,615	165		6.7	6.0	17.3
9894	Marlboro.	do.	do.	15,285	165	.52	5.7	7.0	19.3
13864	do.	do.	do.	(2)	(2)	(2)	4.0	10.0	16.7
13863	do.	do.	do.	(2)	(2)	(2)	3.3	12.1	18.0
13883	Brookline.	Hillsboro.	do.	18,250	163	.81	(2)	(2)	18.3
11234	do.	do.	Biotite granite.	19,800	(2)		3.3	12.1	18.0
11419	Millford	do.	Granite	(2)	(2)	(2)	(2)	(2)	18.3
13860	do.	do.	do.	(2)	(2)	(2)	5.1	7.8	18.0
13861	South Millford.	do.	do.	(2)	(2)	(2)	4.3	9.3	17.3
9994	Allenstown.	Merrimac.	do.	18,110	165	.61	2.5	16.0	19.0
13867	do.	do.	do.	(2)	(2)	(2)	3.4	11.8	18.7
14892	Concord.	do.	do.	(2)	(2)	.75	4.6	8.7	17.7
13863	do.	do.	do.	(2)	(2)	(2)	3.4	11.8	18.7
12185	Webb.	do.	do.	(2)	163	2.30	4.4	9.1	17.0
11711	Dover.	Strafford.	Siliceous marble.	(2)	173	.09	4.8	8.3	17.7
12325	do.	do.	Slate.	(2)	177	.12	(2)	(2)	14.7

Exact locality nor known.

Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

NEW JERSEY.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
12253	Upper Montclair.....	Essex.....	Altered basalt.....	(2)	183	0.20	2.9	13.8	18.7	43
10705	Lambertville.....	Hunterdon.....	Diabase.....	(2)	183	.46	2.8	14.3	18.7	19
12386	do.....	do.....	Gabbritic diabase.....	(2)	184	.22	3.3	12.1	18.2	29
12333	Middle Valley.....	do.....	Hornblende gneiss.....	(2)	189	.11	3.4	11.8	18.0	15
14869	Vernoy.....	do.....	Dolomite.....	(2)	177	.39	3.0	13.3	15.3	8
16027	do.....	do.....	Dolomite marble.....	(2)	177	.38	3.5	11.4	15.7	11
16029	do.....	do.....	do.....	(2)	177	.48	3.4	11.8	16.0	14
19114	Pennington.....	do.....	Altered diabase.....	(2)	182	.24	3.4	11.8	18.3	18
14379	Chrome.....	Middlesex.....	Copper slag.....	(2)	221	.45	4.1	9.8	16.7	25
14644	Perth Amboy.....	do.....	do.....	(2)	218	1.35	2.9	13.8	16.7	15
18723	Dover.....	Morris.....	Slag.....	(2)	114	8.53	17.6	2.3	(2)	(2)
11906	Millington.....	do.....	Basalt.....	(2)	185	.47	2.2	18.0	16.7	15
12421	Morrisstown.....	do.....	Altered gabbro.....	(2)	170	.71	(2)	(2)	17.7	12
9921	Mount Hope.....	do.....	Pyroxene granite.....	(2)	178	.44	2.4	16.7	18.3	9
10472	Bound Brook.....	Somerset.....	Altered diabase.....	(2)	184	.06	2.2	18.2	18.7	30
12101	do.....	do.....	Basalt.....	(2)	182	.24	2.6	13.2	18.7	35
14641	do.....	do.....	Diabase.....	(2)	186	.15	1.6	23.0	19.3	27
14973	Chimney Rock.....	do.....	Basalt.....	(2)	180	.59	2.1	19.0	18.0	18
14982	do.....	do.....	Altered basalt.....	(2)	183	.29	2.2	18.2	18.7	21
14983	do.....	do.....	do.....	(2)	186	.21	1.8	22.2	18.0	31
14638	(1).....	(1).....	Basalt.....	(2)	183	.15	2.4	16.4	17.6	12

NEW MEXICO.

9768	Silver City.....	Grant.....	Altered granite porphyry.....	(2)	156	1.73	3.4	11.8	18.6	18
19450	Deming (near).....	Luna.....	Feldspathic quartzite.....	(2)	162	.92	3.1	12.9	(2)	(2)
17747	Mora.....	do.....	Pegmatitic granite.....	(2)	160	.82	14.4	2.8	(2)	(2)
17737	Valley Ranch.....	San Miguel.....	Aplitic diorite.....	(2)	169	3.13	5.1	7.8	(2)	(2)
17739	do.....	do.....	Bituminous schist.....	(2)	180	.26	3.8	10.5	16.7	14
16202	Las Vegas (near).....	do.....	Siliceous clay limestone.....	(2)	166	.42	4.6	8.7	16.7	8
17292	Laguna (near).....	Valencia.....	Calcareous sandstone.....	(2)	152	3.92	6.1	6.6	11.3	7

NEW YORK.

Locality	Rock	Specific Gravity	Compressive Strength (lb. per sq. in.)	Tensile Strength (lb. per sq. in.)	Modulus of Elasticity (lb. per sq. in.)	Wear (cu. in. per cu. in. of rock)	Crushing Strength (lb. per sq. in.)	Impact Strength (ft. lb. per cu. in. of rock)	Notes
13558 Stonaco	Siliceous dolomite.	174	0.25	2.6	15.4	16.3	29		
11505 Wingdale	Dolomitic marble.	177	.20	9.7	4.1	10.0	3		
16543 Akron	Limestone.	168	.19	5.4	7.4	(2)	10		
12729 Buffalo	do.	169	.18	4.2	9.8	(2)	8		
18719 do.	Slag.	120	6.32	15.8	2.5	(2)			
18720 do.	do.	128	5.72	15.4	2.6	(2)			
16544 Jay	Limestone.	164	.31	6.2	6.5	16.0	10		
16154 do.	Gabbro.	179	.85	2.7	14.8	17.6	10		
11953 Mayfield	Argillaceous limestone.	176	.25	3.7	7.0	16.0	16		
12043 Leroy	Cherty limestone.	165	3.58	5.7	10.3	19.3	8		
12027 do.	Limestone.	168	.20	3.9	10.3	15.3	13		
10997 North Leroy	Dolomite.	173	.60	3.1	12.9	13.3	10		
12637 Dolgevillo	do.	176	.51	3.7	10.8	12.0	13		
11423 Little Falls	Hornblende gneiss.	176	.83	4.5	8.9	17.3	12		
12117 do.	Biotite granite.	(2)	(2)	(2)	(2)	(2)			
10236 Alexandria Bay	Granite.	163	.49	2.8	14.3	18.0	10		
10319 do.	do.	(2)	(2)	2.9	13.8	18.7	11		
13890 do.	Limestone.	169	.19	7.6	5.3	16.7	6		
18661 Chaumont	do.	168	.60	4.9	8.2	14.7	12		
18660 Felt Mills	do.	168	.49	6.4	6.3	13.3	6		
18659 Watertown	do.	162	.29	4.9	8.2	15.3	14		
11903 Amsterdam	do.	166	1.63	3.8	10.5	14.3	8		
14462 Oaks Corners.	Argillaceous limestone.	164	2.30	4.8	8.3	18.7	24		
18327 Oaks (Phelps).	Limestone.	176	.17	3.1	12.9	14.0	19		
13557 Cedar Cliff	Sandstone.	(2)	(2)	3.4	11.8	17.3	9		
10042 Albion	do.	152	3.07	3.9	10.3	14.7	10		
17327 do.	do.	150	3.56	4.0	10.0	15.0	9		
17328 do.	do.	149	3.59	5.2	9.3	15.3	9		
20353 do.	do.	166	.27	5.2	7.7	18.7	9		
12714 Oregon	Granite gneiss.	187	.19	3.0	13.3	19.0	13		
10093 Rockland Lake	Gabbroitic diabase.	183	.27	3.6	11.1	19.0	12		
10094 do.	do.	189	.28	3.0	13.3	18.7	19		
10771 do.	do.	173	.50	7.8	5.1	(2)			
16032 Tompkins Cove	Argillaceous dolomite.	170	.29	(2)	(2)	10.3			
11504 Gouverneur	Marble	157	2.02	2.8	14.3	18.0	12		
10911 Hopkinson	Sandstone.	35, 240	1.04	3.0	13.3	14.7	13		
11182 Collicoon	Feldspathic sandstone.	166	.64	3.3	12.1	15.3	14		
11181 Tusten	do.	26, 300	.45	4.2	9.5	14.7	9		
20820 Ontario	Dolomite.	176	.62	3.5	11.4	17.0	9		
10099 Peekskill (near)	Hypersthene syenite.	179	.26	5.6	7.1	13.0	4		
20171 Verplanck	Dolomitic marble.	177	.21	3.1	7.8	13.0	5		
20172 do.	do.	175	.28	4.2	9.5	12.0	4		
20173 do.	do.	168	.77	5.8	6.9	18.0	5		
11199 Yorktown	Granite.	16, 200							

1 Exact locality not known.

2 Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

NORTH CAROLINA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
15877	Haw River.	Alamance.	Diabase.	(2)	181	0.53	3.5	11.4	18.0	16
19788	Hiddenite.	Alexander.	Granite gneiss.	(2)	164	.61	7.2	5.6	18.7	6
20189	Sparta.	Alleghany.	Biotite gneiss.	(2)	171	.35	4.4	9.1	18.7	10
20196	(1)	do.	Quartz.	(2)	162	.35	12.8	3.1	17.7	3
17048	Jefferson.	Ash.	Hornblende gneiss.	(2)	185	.89	5.2	7.7	12.0	6
10193	Cranberry.	Avery.	do.	(2)	208	.70	4.3	9.3	(2)	(2)
10194	do.	do.	do.	(2)	192	.48	5.5	7.3	(2)	(2)
9858	Ashville.	Buncombe.	Biotite gneiss.	(2)	168	.26	4.4	9.1	19.3	7
10872	do.	do.	do.	(2)	165	1.35	2.7	14.8	18.0	10
17869	do.	do.	Granite.	(2)	165	.56	3.0	13.3	19.3	11
13901	Craggy.	do.	do.	(2)	163	.49	2.8	14.3	18.5	12
10973	do.	do.	Biotite gneiss.	(2)	172	.67	3.5	11.4	18.0	13
11344	Sunset Mountain.	do.	do.	(2)	166	.33	4.1	9.8	17.3	7
11345	do.	do.	do.	(2)	171	.25	3.5	11.4	16.7	10
16071	Granite Falls (near).	Caldwell.	do.	(2)	166	.59	3.1	12.9	16.7	11
20411	Felham.	Caswell.	Granite gneiss.	28,580	161	.59	2.9	13.8	18.3	8
16514	do.	do.	do.	(2)	162	.76	3.7	10.8	(2)	12
17474	Stokesland.	do.	Biotite gneiss.	(2)	162	.75	4.5	8.9	18.0	9
19789	Stokesland (near).	do.	do.	(2)	168	.62	6.4	6.2	18.3	8
18980	Yanceyville (near).	do.	Serotite gneiss.	(2)	162	.75	4.1	9.8	18.0	7
17406	(1)	Chatham.	Altered andesite.	(2)	180	.20	1.7	23.5	17.7	45
11907	Regal.	Cherokee.	Marble.	(2)	169	.23	6.1	6.6	12.3	3
13027	New Bern.	Craven.	Shell limestone.	(2)	(2)	(2)	49.0	.8	(2)	(2)
20046	Newson.	Durham.	Altered rhyolite.	(2)	165	.10	2.8	14.3	18.7	32
14753	Winston-Salem.	Forsyth.	Gneissoid granite.	(2)	165	.43	4.1	9.8	18.0	7
16896	Belmont (near).	Gaston.	Biotite gneiss.	(2)	170	.43	4.3	9.3	16.7	8
12180	do.	do.	Aplitic granite.	(2)	173	.85	2.9	13.8	(2)	(2)
14403	do.	do.	Biotite granite.	(2)	171	.39	3.5	11.4	17.8	8
15775	Greensboro.	Guilford.	Quartz and quartzite.	(2)	164	.18	8.6	4.7	(2)	(2)
19979	Summerfield.	do.	Granite schist.	(2)	167	.50	3.5	11.4	18.0	9
15878	(1)	do.	Amphibolite.	(2)	190	.42	2.8	14.3	18.7	18
16536	Littleton.	Halifax.	Hornblende quartzite.	(2)	170	.33	2.7	14.6	(2)	17
20045	do.	do.	Hornblende gneiss.	(2)	169	.50	2.8	14.3	18.7	11
12770	Canton (near).	Haywood.	Granite gneiss.	(2)	157	1.16	20.3	2.0	17.3	6
11751	Waynesville.	do.	Biotite gneiss.	(2)	173	.76	5.7	7.0	18.0	5
17480	Hendersonville.	Henderson.	Gneissoid granite.	(2)	(2)	(2)	3.4	11.8	(2)	(2)
19653	Statesville.	Iredell.	Biotite gneiss.	20,235	(2)	(2)	6.0	6.7	17.3	7

	(²)	(³)	(⁴)	(⁵)	(⁶)	(⁷)	(⁸)	(⁹)	(¹⁰)	(¹¹)	(¹²)	(¹³)	(¹⁴)	(¹⁵)	(¹⁶)	(¹⁷)	(¹⁸)	(¹⁹)	(²⁰)	(²¹)	(²²)	(²³)	(²⁴)	(²⁵)	(²⁶)	(²⁷)	(²⁸)	(²⁹)	(³⁰)	(³¹)	(³²)	(³³)	(³⁴)	(³⁵)	(³⁶)	(³⁷)	(³⁸)	(³⁹)	(⁴⁰)	(⁴¹)	(⁴²)	(⁴³)	(⁴⁴)	(⁴⁵)	(⁴⁶)	(⁴⁷)	(⁴⁸)	(⁴⁹)	(⁵⁰)	(⁵¹)	(⁵²)	(⁵³)	(⁵⁴)	(⁵⁵)	(⁵⁶)	(⁵⁷)	(⁵⁸)	(⁵⁹)	(⁶⁰)	(⁶¹)	(⁶²)	(⁶³)	(⁶⁴)	(⁶⁵)	(⁶⁶)	(⁶⁷)	(⁶⁸)	(⁶⁹)	(⁷⁰)	(⁷¹)	(⁷²)	(⁷³)	(⁷⁴)	(⁷⁵)	(⁷⁶)	(⁷⁷)	(⁷⁸)	(⁷⁹)	(⁸⁰)	(⁸¹)	(⁸²)	(⁸³)	(⁸⁴)	(⁸⁵)	(⁸⁶)	(⁸⁷)	(⁸⁸)	(⁸⁹)	(⁹⁰)	(⁹¹)	(⁹²)	(⁹³)	(⁹⁴)	(⁹⁵)	(⁹⁶)	(⁹⁷)	(⁹⁸)	(⁹⁹)	(¹⁰⁰)	(¹⁰¹)	(¹⁰²)	(¹⁰³)	(¹⁰⁴)	(¹⁰⁵)	(¹⁰⁶)	(¹⁰⁷)	(¹⁰⁸)	(¹⁰⁹)	(¹¹⁰)	(¹¹¹)	(¹¹²)	(¹¹³)	(¹¹⁴)	(¹¹⁵)	(¹¹⁶)	(¹¹⁷)	(¹¹⁸)	(¹¹⁹)	(¹²⁰)	(¹²¹)	(¹²²)	(¹²³)	(¹²⁴)	(¹²⁵)	(¹²⁶)	(¹²⁷)	(¹²⁸)	(¹²⁹)	(¹³⁰)	(¹³¹)	(¹³²)	(¹³³)	(¹³⁴)	(¹³⁵)	(¹³⁶)	(¹³⁷)	(¹³⁸)	(¹³⁹)	(¹⁴⁰)	(¹⁴¹)	(¹⁴²)	(¹⁴³)	(¹⁴⁴)	(¹⁴⁵)	(¹⁴⁶)	(¹⁴⁷)	(¹⁴⁸)	(¹⁴⁹)	(¹⁵⁰)	(¹⁵¹)	(¹⁵²)	(¹⁵³)	(¹⁵⁴)	(¹⁵⁵)	(¹⁵⁶)	(¹⁵⁷)	(¹⁵⁸)	(¹⁵⁹)	(¹⁶⁰)	(¹⁶¹)	(¹⁶²)	(¹⁶³)	(¹⁶⁴)	(¹⁶⁵)	(¹⁶⁶)	(¹⁶⁷)	(¹⁶⁸)	(¹⁶⁹)	(¹⁷⁰)	(¹⁷¹)	(¹⁷²)	(¹⁷³)	(¹⁷⁴)	(¹⁷⁵)	(¹⁷⁶)	(¹⁷⁷)	(¹⁷⁸)	(¹⁷⁹)	(¹⁸⁰)	(¹⁸¹)	(¹⁸²)	(¹⁸³)	(¹⁸⁴)	(¹⁸⁵)	(¹⁸⁶)	(¹⁸⁷)	(¹⁸⁸)	(¹⁸⁹)	(¹⁹⁰)	(¹⁹¹)	(¹⁹²)	(¹⁹³)	(¹⁹⁴)	(¹⁹⁵)	(¹⁹⁶)	(¹⁹⁷)	(¹⁹⁸)	(¹⁹⁹)	(²⁰⁰)	(²⁰¹)	(²⁰²)	(²⁰³)	(²⁰⁴)	(²⁰⁵)	(²⁰⁶)	(²⁰⁷)	(²⁰⁸)	(²⁰⁹)	(²¹⁰)	(²¹¹)	(²¹²)	(²¹³)	(²¹⁴)	(²¹⁵)	(²¹⁶)	(²¹⁷)	(²¹⁸)	(²¹⁹)	(²²⁰)	(²²¹)	(²²²)	(²²³)	(²²⁴)	(²²⁵)	(²²⁶)	(²²⁷)	(²²⁸)	(²²⁹)	(²³⁰)	(²³¹)	(²³²)	(²³³)	(²³⁴)	(²³⁵)	(²³⁶)	(²³⁷)	(²³⁸)	(²³⁹)	(²⁴⁰)	(²⁴¹)	(²⁴²)	(²⁴³)	(²⁴⁴)	(²⁴⁵)	(²⁴⁶)	(²⁴⁷)	(²⁴⁸)	(²⁴⁹)	(²⁵⁰)	(²⁵¹)	(²⁵²)	(²⁵³)	(²⁵⁴)	(²⁵⁵)	(²⁵⁶)	(²⁵⁷)	(²⁵⁸)	(²⁵⁹)	(²⁶⁰)	(²⁶¹)	(²⁶²)	(²⁶³)	(²⁶⁴)	(²⁶⁵)	(²⁶⁶)	(²⁶⁷)	(²⁶⁸)	(²⁶⁹)	(²⁷⁰)	(²⁷¹)	(²⁷²)	(²⁷³)	(²⁷⁴)	(²⁷⁵)	(²⁷⁶)	(²⁷⁷)	(²⁷⁸)	(²⁷⁹)	(²⁸⁰)	(²⁸¹)	(²⁸²)	(²⁸³)	(²⁸⁴)	(²⁸⁵)	(²⁸⁶)	(²⁸⁷)	(²⁸⁸)	(²⁸⁹)	(²⁹⁰)	(²⁹¹)	(²⁹²)	(²⁹³)	(²⁹⁴)	(²⁹⁵)	(²⁹⁶)	(²⁹⁷)	(²⁹⁸)	(²⁹⁹)	(³⁰⁰)
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Test not made.

¹ Exact locality not known.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight, pounds per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
19654	Rollsville.....	Wake.....	Biotite granite.....	21,790	167	.53	7.0	5.7	18.0	7
11402	Wendell.....	do.....	do.....	(2)	164	1.04	4.3	9.3	17.3	4
14174	do.....	do.....	do.....	(2)	(2)	(2)	(2)	(2)	18.0	5
16256	Manson.....	Warren.....	Gneissoid granite.....	164	164	.76	4.2	9.5	17.0	6
11566	Neversom.....	Wilson.....	Granite.....	21,920	165	.34	5.4	7.4	18.7	9
19405	Bald Mountain.....	Yancey.....	Altered rhyolite.....	(2)	168	.02	2.9	13.8	19.2	28
19406	do.....	do.....	do.....	60,725	166	.12	3.0	13.3	18.3	15
OHIO.										
16722	Liberty Township.....	Adams.....	Limestone.....	(2)	173	0.60	5.5	7.3	11.0	5
14016	Delphos.....	Allen.....	Argillaceous dolomite.....	(2)	169	.20	4.8	8.3	16.2	6
14018	do.....	do.....	Dolomite.....	(2)	174	1.04	5.1	7.8	15.3	9
14019	do.....	do.....	do.....	(2)	171	.89	4.4	9.1	14.7	9
14772	do.....	do.....	do.....	(2)	170	.70	4.8	8.3	15.3	13
9864	Lima.....	do.....	Argillaceous dolomite.....	(2)	165	2.67	3.2	12.5	14.7	7
10025	do.....	do.....	Dolomite.....	(2)	168	2.77	3.5	11.4	14.7	12
10026	do.....	do.....	Argillaceous limestone.....	(2)	168	1.96	3.7	10.8	16.0	11
10027	do.....	do.....	do.....	(2)	168	2.26	3.6	11.1	15.0	11
10305	do.....	do.....	Limestone.....	(2)	169	1.80	4.2	9.5	16.0	6
15216	do.....	do.....	Argillaceous dolomite.....	(2)	166	1.86	3.7	10.8	14.7	9
20053	Somerset.....	Belmont.....	Sandstone.....	(2)	142	1.84	6.2	6.5	14.7	7
19379	Union Township.....	do.....	do.....	(2)	135	7.48	26.6	1.5	0	2
20149	do.....	do.....	do.....	(2)	136	7.43	24.2	1.7	0	4
20054	Warren.....	do.....	Feldspathic sandstone.....	(2)	141	6.28	4.1	1.6	44.0	2
9853	Middletown.....	Butler.....	Basic open-hearth slag.....	(2)	209	2.35	24.6	9.9	(2)	2
9854	do.....	do.....	do.....	(2)	190	2.74	20.4	9.8	(2)	4
19625	Lewis.....	Brown.....	Limestone.....	(2)	169	.20	6.9	3.8	12.7	6
20099	Ferry.....	do.....	Argillaceous limestone.....	(2)	169	.63	7.2	3.6	10.7	7
20321	do.....	do.....	do.....	(2)	166	2.06	6.4	6.3	11.7	5
20322	Sterling.....	do.....	do.....	(2)	150	2.19	4.3	9.3	11.3	3
16660	Springfield.....	Clark.....	Micaceous sandstone.....	(2)	141	7.30	19.6	2.0	(2)	5
17062	Miamiville.....	Clermont.....	Limestone.....	18,575	171	.17	5.5	7.3	13.0	5
19140	Stonelick.....	do.....	do.....	(2)	171	.58	5.3	7.6	11.3	6
16728	(1).....	do.....	do.....	(2)	168	.78	10.0	4.0	11.7	6
20129	(1).....	do.....	do.....	(2)	169	.47	6.6	6.1	13.3	6
10516	Farmer.....	Clinton.....	do.....	(2)	171	1.66	5.2	7.6	13.2	4

10517	Richland	Siliceous limestone	167	49	6.6	6.1	13.7	5
14524	do.	Argillaceous dolomite	157	3.48	9.4	4.3	13.3	5
15096	Leetonia	Blast-furnace slag	111	8.42	16.2	2.5	(2)	(2)
12890	Berea	Sandstone	124	7.41	(1)	(2)	.7	5
18718	Cleveland	do.	141	4.09	15.6	2.6	(2)	(2)
18730	do.	do.	136	5.12	21.0	1.9	(2)	(2)
12891	Euclid	Sandstone	139	6.55	(2)	(2)	2.7	9
15464	Defiance	Shale	157	4.5	10.0	4.0	(2)	6
15215	Delaware	Argillaceous limestone	163	4.93	5.3	7.6	15.8	8
20394	Troy	do.	168	1.52	3.5	11.4	15.0	9
11331	Sandusky	do.	167	1.38	3.0	13.3	12.9	9
13073	do.	Limestone	169	1.07	4.8	8.3	15.9	10
19783	do.	Argillaceous limestone	166	1.56	4.7	8.5	12.4	8
16347	Franklin	Blast-furnace slag	167	.70	3.9	10.3	13.3	6
16340	do.	Limestone	139	5.44	12.1	3.3	(2)	6
16418	do.	Argillaceous limestone	165	1.44	4.0	10.0	14.7	4
10536	do.	do.	167	1.39	4.3	9.3	(2)	6
15888	Marble Cliff	do.	162	1.14	5.4	7.4	(2)	7
17411	do.	do.	(2)	(2)	(2)	(2)	15.2	6
19327	Springfield	Limestone	166	1.52	4.7	8.5	15.3	7
11329	Dunkirk	Sandstone	166	1.50	4.5	8.9	(2)	6
11202	Kenton	Argillaceous dolomite	142	7.18	23.7	1.7	0	3
11225	do.	Dolomite	167	2.17	3.4	11.8	15.0	10
16417	do.	do.	167	2.08	2.7	14.8	15.3	15
20519	Fairfield	do.	164	2.55	2.5	16.0	17.0	10
20520	do.	do.	168	2.12	2.9	13.9	(2)	(2)
2521	do.	do.	166	2.35	13.5	3.0	14.0	5
14525	Homar	do.	154	4.43	14.2	2.8	19.3	6
19141	Paint	Argillaceous dolomite	160	2.86	7.1	5.6	12.7	5
19142	do.	Dolomite	169	1.35	7.4	5.4	12.7	6
19730	do.	do.	161	2.92	12.5	3.2	12.7	7
16639	Salt Creek Township	Argillaceous dolomite	160	3.90	11.6	3.4	12.7	10
11198	Bellevue	do.	165	1.78	6.5	6.2	13.3	5
13095	do.	Argillaceous dolomite	163	3.91	5.3	7.5	3.7	5
18717	Jackson	Dolomite	156	4.89	4.9	5.8	13.7	5
20566	do.	Limestone	157	5.85	6.3	8.2	6.0	5
9834	Island Creek	Feldspathic sandstone	136	7.75	7.5	5.3	10.3	5
20348	Ironton	Slag	176	.39	4.5	8.9	(2)	(2)
15906	do.	Blast-furnace slag	156	2.78	10.3	3.9	(2)	(2)
15997	do.	Sandstone	146	4.30	18.2	2.2	15.3	4
18728	Lorain	Blast furnace slag	181	1.73	5.8	6.9	16.0	6
14333	do.	do.	148	4.08	7.2	5.6	18.0	9
18731	do.	do.	153	3.47	7.1	5.6	(2)	(2)
13093	Toledo	Slag	136	3.97	8.6	4.7	(2)	(2)
18865	do.	Blast furnace slag	123	5.89	16.8	2.4	(2)	(2)
9890	Waterville	Dolomite	172	5.71	24.3	1.6	(2)	(2)
9983	do.	Argillaceous dolomite	135	3.51	6.1	2.5	12.7	6
	do.	Dolomite	168	2.36	3.3	12.1	16.3	11
	do.	do.	168	2.04	2.8	14.3	16.3	14

2 Test not made.

1 Exact locality not known.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

OHIO—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
13170	Waterville.	Lucas	Slate.	(2)	171	40	8.6	4.6	16.0	14
13397	do.	do.	Limestone.	(2)	165	23	4.0	10.0	16.0	10
16747	do.	do.	Magnesian limestone.	(2)	163	2.07	6.9	5.8	4.3	5
16947	Whitehouse.	do.	Siliceous limestone.	(2)	161	2.90	6.2	6.5	9.3	6
19289	do.	do.	Argillaceous limestone.	(2)	160	3.49	6.1	6.6	7.0	6
18737	Brier Hill.	Mahoning	Slag.	(2)	135	5.16	19.5	2.1	(2)	(2)
16290	Youngstown.	do.	Blast furnace slag.	(2)	201	3.07	12.8	3.1	(2)	(2)
17504	do.	do.	do.	(2)	(2)	(2)	20.1	2.0	(2)	(2)
17505	do.	do.	do.	(2)	(2)	(2)	26.0	1.6	(2)	(2)
10537	Piqua.	Miami	Dolomite.	9, 810	156	2.53	10.3	3.9	11.0	4
10538	do.	do.	do.	15, 150	178	.97	4.8	8.3	15.0	13
10535	Centerville.	Montgomery	Argillaceous limestone.	(2)	(2)	(2)	(2)	(2)	10.9	3
19350	Deerfield.	Morgan	Sandstone.	(2)	138	8.54	16.7	2.4	.0	3
19352	do.	do.	Argillaceous limestone.	(2)	168	.74	6.2	6.5	13.3	6
16922	Malta.	do.	Limestone.	(2)	168	.26	6.5	6.2	12.7	7
17389	do.	do.	Argillaceous limestone.	(2)	164	1.32	4.7	8.5	15.3	7
19351	do.	do.	do.	(2)	162	1.64	5.9	6.8	14.7	8
16171	do.	do.	Feldspathic sandstone.	(2)	143	6.78	7.7	5.2	.0	4
16173	do.	do.	do.	(2)	138	7.61	10.5	3.8	.0	4
19377	Stock.	Noble	Ferruginous sandstone.	(2)	142	6.92	11.9	3.4	.0	4
19378	do.	do.	Argillaceous limestone.	(2)	168	23	6.0	6.7	16.0	7
19793	Allen.	Ottawa	Dolomite.	(2)	162	3.15	9.4	4.3	13.3	5
9973	Limestone.	do.	do.	(2)	162	(2)	5.5	7.3	12.0	7
9945	Rocky Ridge.	do.	do.	13, 360	175	41	5.4	7.4	(2)	9
13217	Thorn Township.	Perry	Chert.	(2)	152	1.95	7.4	5.4	(2)	(2)
10539	Circleville.	Pickaway	Dolomitic marble.	(2)	164	2.82	4.4	9.1	14.7	9
12358	New Paris.	Freble	Dolomite.	16, 480	167	1.12	3.1	11.8	16.7	6
13888	Woodville.	Sandusky	do.	(2)	160	4.14	7.3	3.3	17.0	7
16547	do.	do.	do.	(2)	159	3.59	5.8	6.9	16.0	7
17871	Bascom.	do.	do.	(2)	162	3.53	5.8	6.9	(2)	(2)
11330	Bloomville.	Seneca	do.	(2)	161	3.71	7.9	5.1	8.7	4
19331	Clinton Township.	do.	Argillaceous limestone.	16, 565	166	3.11	3.6	11.1	12.5	6
17872	Liberty.	do.	Dolomite.	(2)	160	3.90	5.4	7.4	12.7	7
18732	Hubbard.	Trumbull	do.	(2)	165	2.72	7.5	5.3	11.0	7
18734	MacDonald.	do.	Slag.	(2)	137	5.63	13.0	3.1	(2)	(2)
20578	Dover.	MacDonald	do.	(2)	125	5.80	15.4	2.6	12.7	5
11328	Middlepoint.	Tuscarawas	Blast furnace slag.	(2)	120	7.67	18.0	2.2	12.7	10
		Van Wert.	Argillaceous limestone.	27, 570	169	1.76	3.8	10.5	15.6	

14771	do.	do.	(1)	166	2.07	5.0	8.0	15.7	8
9947	Bowling Green.	Wood.	(2)	165	1.38	7.5	5.3	12.2	8
10346	Luckey.	do.	(2)	162	3.68	7.3	5.5	12.0	6
9883	North Baltimore.	do.	(2)	168	2.61	5.0	10.0	16.0	10
9957	do.	do.	(2)	168	2.98	4.0	10.0	14.3	14
15047	do.	do.	(2)	168	2.98	4.6	8.7	(3)	(2)
19446	(1)	(1)	(2)	156	2.80	4.3	9.3	14.7	8

OKLAHOMA.

19366	Springtown.	Aloka.	(2)	158	1.75	4.6	8.7	15.7	9
19367	do.	do.	(2)	161	.82	4.0	10.0	19.3	16
14997	Armstrong (near).	Bryan.	(2)	164	1.49	6.3	6.4	13.3	6
16134	do.	do.	(2)	166	1.46	4.9	8.2	15.7	6
15118	Caddo (near).	do.	(2)	153	5.08	6.4	6.3	.0	5
16170	do.	do.	(2)	158	3.69	6.1	6.6	14.7	5
16136	Durant.	do.	(2)	154	5.32	6.8	5.9	11.3	7
16135	Durant (near).	do.	(2)	167	1.20	4.9	8.2	14.7	7
19348	do.	Johnston.	(2)	189	.09	4.0	10.0	18.7	20
19349	do.	do.	(2)	163	.57	10.3	3.9	18.0	6
20583	Bromide.	do.	(2)	163	1.94	5.9	6.8	15.3	8
17738	Gowen.	Kay.	(2)	145	6.28	8.2	4.9	12.0	4
17057	Latimer.	do.	(2)	143	5.02	15.8	2.5	(3)	(2)
18228	Salina.	Mayes.	(2)	(2)	(3)	4.3	0.3	(3)	(2)
18229	do.	do.	(2)	(2)	(3)	4.5	8.3	(3)	(2)
18230	do.	do.	(2)	(2)	(3)	5.7	7.0	(3)	(2)
19098	Okmulgee.	do.	(2)	102	5.61	15.6	2.6	.7	4
15957	Hartsborne.	Pittsburg.	(2)	168	.49	4.1	9.8	15.7	5
17875	do.	do.	(2)	163	1.32	3.8	10.5	(2)	(2)
15310	Barnett.	Tulsa.	(2)	(2)	(2)	4.2	9.5	(2)	(2)
15790	Lost City.	do.	(2)	163	3.03	5.7	7.0	(2)	(2)
15791	do.	do.	(2)	161	2.50	7.4	5.4	13.3	4
16586	Sands Springs.	do.	(2)	159	2.63	8.2	4.9	11.0	5
16826	do.	do.	(2)	166	.66	5.1	7.8	12.3	7
16825	do.	do.	(2)	163	1.59	6.0	6.7	12.0	6
15788	Tulsa.	do.	(2)	161	1.93	5.8	6.9	13.0	5
15789	do.	do.	(2)	164	1.07	5.7	7.0	12.7	6
14914	do.	do.	(2)	165	1.16	7.1	5.6	14.7	5
11640	Dewey.	Washington.	(2)	166	1.10	5.3	7.6	14.0	6
11641	do.	do.	(2)	164	1.14	5.3	7.6	11.3	5
16000	(1)	(1)	(2)	159	1.88	1.7	23.5	18.3	12
16002	(1)	(1)	(2)	155	2.28	4.9	8.2	(2)	(2)
16030	(1)	(1)	(2)	156	1.72	2.3	17.4	18.3	13

OREGON.

18224	La Grande (near).	Baker.	(2)	174	1.62	3.4	11.8	18.7	18
18222	Nelsons.	Malheur.	(2)	166	.69	3.9	6.8	16.7	7

1 Exact locality not known.

2 Test not made.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

PENNSYLVANIA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
9786	Granite.	Adams.	Gabbroitic diabase.	23,435	(2)	(2)	(2)	(2)	15.2	14
16012	York Springs.	do.	Diabase.	(2)	189	0.53	1.8	22.2	18.7	34
14332	Carnegie.	Allegheny.	Lead slag.	(2)	238	.38	4.3	9.3	17.3	14
18739	Duquesne.	do.	Slag.	(2)	140	3.78	13.7	2.9	(2)	(2)
16977	Parlers Landing.	Armstrong.	Limestone.	19,470	161	.88	4.2	9.5	15.3	6
10104	Birdsboro (near).	Berks.	Diabase.	(2)	(2)	(2)	(2)	23.5	18.7	13
14468	Birdsboro.	do.	do.	(2)	188	.35	1.7	(2)	18.7	10
18803	do.	do.	Slag.	(2)	141	3.24	9.5	4.2	18.7	(2)
14642	Douglas Township.	do.	Altered slate.	(2)	170	.32	1.9	21.1	18.7	28
18862	Temple.	do.	Slag.	(2)	114	8.08	18.8	12.1	(2)	(2)
18221	Tuckertown (near).	do.	Siliceous limestone.	(2)	170	.12	3.7	10.8	15.7	10
11733	Yardley (near).	do.	Granite gneiss.	16,330	165	.21	4.0	10.0	18.3	15
13129	Tyrone.	Blair.	Sandstone.	(2)	160	.13	3.3	12.1	18.7	12
15989	do.	do.	Chert.	(2)	(2)	(2)	(2)	13.3	(2)	(2)
15987	Rock Hill.	Bucks.	Hypersthene diabase.	(2)	(2)	(2)	3.0	17.4	(2)	(2)
11409	Quakertown.	do.	Diabase.	34,040	191	.17	2.8	14.3	18.0	10
12166	do.	do.	Hypersthene diabase.	(2)	186	2.02	11.0	3.6	18.3	25
14150	Johnstown.	Cambria.	Open-hearth slag.	(2)	128	6.88	18.9	2.1	(2)	(2)
14151	do.	do.	Slag.	(2)	152	1.48	7.4	5.4	15.3	9
12908	(1)	do.	Sandstone.	(2)	153	.27	6.7	6.0	18.3	8
13174	(1)	do.	do.	(2)	152	.27	8.2	4.9	16.7	7
13178	(1)	do.	do.	(2)	165	.42	3.3	12.1	18.7	16
12477	Lehigh Gap.	Carbon.	Quartzite.	(2)	178	.35	2.8	14.3	18.7	(2)
12478	do.	do.	Feldspathic quartzite.	(2)	123	7.52	13.1	3.1	(2)	10
14111	Palmerton.	do.	Spiegel slag.	(2)	163	.83	4.7	8.5	18.0	5
11261	Summerville.	do.	Feldspathic sandstone.	15,090	176	.70	7.7	5.2	14.0	17
14943	Devault.	Chester.	Dolomitic sandstone.	(2)	176	.51	4.0	10.0	14.0	8
19087	Howellville.	do.	Dolomite.	(2)	173	.36	4.3	9.3	(2)	(2)
14294	do.	do.	Marble.	(2)	175	.31	4.6	8.7	14.0	5
17919	do.	do.	do.	(2)	175	.31	4.6	8.7	14.0	5
12767	Berwick.	Columbia.	Sandstone.	(2)	164	.35	4.8	8.3	18.7	14
12181	Catawissa.	do.	Feldspathic sandstone.	(2)	167	.38	2.8	14.3	19.3	17
12186	do.	do.	do.	(2)	166	.41	3.2	12.5	19.3	25
12361	Conewago.	Dauphin.	Diabase.	(2)	188	.35	2.8	14.3	18.0	20
10357	(1)	do.	Biotite gneiss.	(2)	(2)	(2)	(2)	(2)	18.0	9
18866	Erie.	Delaware.	Slag.	(2)	135	2.35	16.5	2.4	(2)	(2)
9773	Connellsville.	Erie.	Siliceous limestone.	(2)	168	.46	2.8	14.3	17.7	13
18727	Fayette.	Fayette.	Slag.	(2)	129	6.33	14.5	2.8	(2)	(2)
13933	Point Marion.	do.	Feldspathic sandstone.	(2)	151	3.53	10.3	3.9	11.0	6

15199	Fayetteville.....	Franklin.....	Quartzite.....	158	.85	4.9	8.2	19.0	11
12373	Union Furnace.....	Huntington.....	Marble.....	173	.33	3.9	10.3	15.7	7
15440	Donaghmore.....	Lebanon.....	Blast-furnace slag.....	123	8.50	8.8	4.5	(2)	(2)
14969	Ennis.....	Lehigh.....	Altered diorite.....	175	.77	5.8	6.9	(2)	7
18740	do.....	do.....	Slag.....	134	5.65	13.1	3.1	(2)	(2)
15441	Hockendaqua.....	do.....	Blast-furnace slag.....	130	7.70	17.1	2.3	12.3	3
18947	do.....	do.....	Slag.....	121	5.10	19.5	2.1	(2)	(2)
15351	(1).....	do.....	Diorite.....	184	.91	5.0	8.0	18.0	10
11255	Duryea.....	Luzerne.....	Calcareous sandstone.....	167	.41	3.4	11.8	16.7	13
11352	White Haven.....	do.....	Feldspathic quartzite.....	(2)	(2)	(2)	(2)	(2)	19
18104	do.....	do.....	Sandstone.....	169	.17	2.6	15.4	18.3	16
10672	Jersey Shore.....	do.....	Siliceous limestone.....	166	.44	2.6	15.4	18.2	9
19239	Lime Bluff.....	do.....	Argillaceous limestone.....	21, 160	.27	7.3	5.5	14.7	8
10518	Montoursville.....	do.....	do.....	168	.10	6.6	6.1	16.2	6
12929	Montoursville (near).....	do.....	Limestone.....	169	.18	7.5	5.3	15.3	5
12651	Green Lane.....	Montgomery.....	Altered slate.....	169	.30	2.3	17.4	17.3	24
12687	do.....	do.....	Siliceous slate.....	172	.38	4.2	9.5	18.0	10
13939	Ivy Rock.....	do.....	Dolomite marble.....	177	.26	4.9	8.2	15.3	7
17921	Lafayette.....	do.....	Granite.....	168	.54	3.2	12.5	19.0	11
18735	Pettistown.....	do.....	Slag.....	133	4.83	14.4	2.8	(1)	(2)
12688	Bethlehem (near).....	do.....	Dolomite.....	38, 949	.04	4.9	8.1	15.0	10
12690	Bethlehem.....	do.....	Limestone.....	171	.14	5.2	7.7	14.7	7
12691	do.....	do.....	do.....	167	.28	6.2	6.5	11.8	8
15439	do.....	do.....	Blast-furnace slag.....	139	5.19	20.2	2.0	12.3	3
18736	do.....	do.....	Slag.....	129	6.15	11.9	3.4	(2)	(2)
13264	Glendon.....	do.....	do.....	174	1.98	6.1	6.6	15.7	8
10337	South Bethlehem.....	do.....	Blast-furnace slag.....	145	4.42	9.3	4.3	13.7	3
12234	Darmata (near).....	Northumberland.....	Feldspathic sandstone.....	166	.43	2.4	16.7	19.5	8
10429	Mount Carmel.....	do.....	Quartzite.....	163	.53	3.3	12.1	19.0	13
9812	Holmesburg.....	Philadelphia.....	Biotite gneiss.....	165	.58	(2)	(2)	19.0	7
do.....	do.....	do.....	Granite.....	(2)	(2)	(2)	(2)	18.7	7
13907	do.....	do.....	Feldspathic sandstone.....	(2)	(2)	4.9	8.2	18.7	8
14785	Malamoras.....	Pike.....	do.....	165	1.04	5.0	8.0	15.0	10
11190	Shohola.....	do.....	Calcareous sandstone.....	170	.63	3.2	12.5	16.7	12
10345	Confluence.....	Somerset.....	Siliceous limestone.....	158	.34	3.6	11.1	16.7	7
14691	(1).....	(1).....	do.....	169	.35	2.3	17.4	17.7	19

RHODE ISLAND.

19418	Cranston.....	Providence.....	Granite gneiss.....	167	0.37	3.1	12.9	18.7	10
10248	East Providence.....	do.....	Feldspathic sandstone.....	168	.59	3.6	11.1	18.0	12
10171	Lincoln.....	do.....	Granite gneiss.....	170	.17	3.9	10.3	18.7	12
10467	Westerly.....	Washington.....	Granite.....	161	.37	3.9	10.3	18.7	9
11398	do.....	do.....	Biotite granite.....	162	.37	2.4	16.7	19.3	11
12445	do.....	do.....	Granite.....	162	.56	(2)	(2)	18.7	15

¹ Exact locality not known.² Tests not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

SOUTH CAROLINA.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
15453	Trenton.....	Edgefield	Biotite granite.....	(2)	164	0.74	3.2	12.5	(2)	8
10521	Rion.....	Fairfield.	do.....	25,540	165	.59	4.4	9.1	18.3	12
14765	Rion (near)	do.	do.....	20,100	164	.69	3.5	11.4	18.0	7
14765	Windsor.....	do.	do.....	(2)	(2)	(2)	(2)	(2)	18.0	6
10129	Greenville.....	Greenville.	Hornblende gneiss.....	22,970	172	.68	8.0	5.0	17.0	8
10131	Greenville (17 miles from)	do.	Granite.....	(2)	165	.82	4.4	9.1	17.0	6
20015	Travelers Rest.....	do.	do.....	(2)	167	.91	9.1	4.4	17.7	6
20221	do.....	do.	do.....	(2)	(2)	(2)	4.1	9.8	17.7	(2)
20321	do.....	do.	Granite.....	(2)	164	.52	4.8	8.8	17.7	5
14457	Cayce.....	Lexington.	Biotite granite.....	33,000	163	.51	2.5	16.0	18.2	13
14952	Leesville.....	do.	Granite gneiss.....	37,690	166	.35	3.1	12.9	18.7	13
14298	McCormick (4 miles east)	McCormick.	Altered andesite.....	(2)	171	2.82	10.6	3.8	16.7	8
14301	McCormick (near)	do.	Quartz.....	(2)	163	.75	9.8	4.1	(2)	(2)
10130	Beverly.....	Pickens.	Biotite gneiss.....	(2)	166	.75	4.1	9.8	17.7	4
11647	Columbia.....	Richland.	Granite.....	21,500	165	.99	3.1	12.9	18.0	8
19682	Columbia (near)	do.	Quartz.....	(2)	165	.18	6.4	6.3	18.7	6
12380	Spartanburg.....	do.	Biotite granite.....	(2)	165	.57	6.8	5.9	18.5	10
15153	Spartanburg.....	Union.	Diorite.....	(2)	189	.64	2.4	16.7	19.0	17
15153	Lockhart.....	do.	do.....	(2)	188	.10	3.2	12.5	18.0	17
12863	Rock Hill.....	York.	Altered gabbro.....	(2)	188	.10	3.2	12.5	18.0	17

SOUTH DAKOTA.

19068	Bijou Hills.....	Brule.....	Opaline sandstone.....	(2)	144	1.76	(2)	(2)	18.0	10
17874	Gregory.....	Gregory.....	Calcareous sandstone.....	(2)	140	3.92	7.4	5.4	17.7	9
17872	Gregory.....	do.	Tuffaceous limestone.....	(2)	144	5.66	14.2	2.8	6.7	6
18101	Piedmont (west of)	Meade.....	Dolomitic limestone.....	(2)	159	3.05	7.1	5.6	9.3	5
10108	Dell Rapids.....	Minnehaha.	Quartzite.....	(2)	165	.41	2.8	14.3	19.3	17
18985	Dell Rapids.....	do.	Quartzite.....	(2)	166	0.07	2.5	16.0	18.7	20
19596	do.....	do.	do.....	51,700	(2)	(2)	(2)	(2)	(2)	(2)
10894	Sioux Falls.....	do.	Olivine diabase.....	(2)	163	.27	1.4	28.6	19.3	17
10895	do.....	do.	Quartzite.....	(2)	190	.37	2.7	14.8	18.7	18
18984	do.....	do.	do.....	(2)	170	.30	2.3	17.4	19.3	17
10896	Rowena.....	do.	do.....	(2)	164	.28	2.7	14.8	19.3	17
13729	do.....	do.	do.....	(2)	(2)	(2)	(2)	(2)	19.7	17
13730	do.....	do.	do.....	(2)	(2)	(2)	(2)	(2)	19.7	30
16017	Colome (near)	Tripp.....	Sandstone.....	(2)	149	1.06	9.3	4.3	16.3	6
16018	do.....	do.	Siliceous limestone.....	(2)	148	1.52	8.6	4.7	(2)	(2)
16019	Colome.....	do.	do.....	(2)	144	4.19	24.8	1.6	5.3	5
16465	do.....	do.	Tuffaceous limestone.....	(2)	138	6.12	10.9	3.7	(2)	7

¹ Exact locality not known.² Test not made.

TENNESSEE.

9992	Maryville.....	Blount.....	Argillaceous limestone.....	168	0.40	3.8	10.5	16.7	6
9993	do.....	do.....	Limestone.....	168	.30	4.3	9.3	15.7	5
10326	Harrigate (near)	Claborn.....	Dolomite.....	174	1.92	3.2	12.3	16.9	14
10327	do.....	do.....	do.....	171	1.86	3.6	11.1	13.3	7
10292	New Tazewell.....	do.....	Siliceous limestone.....	171	1.84	4.2	9.5	13.3	8
10446	New Tazewell (near)	do.....	Dolomite.....	172	1.20	4.1	9.8	15.2	9
10581	do.....	do.....	Siliceous dolomite.....	170	1.93	4.1	9.8	15.2	9
10483	Jamestown.....	Fentress.....	Sandstone.....	145	3.97	10.8	3.7	15.0	10
12703	Chattanooga (near)	Hamilton.....	Limestone.....	168	.11	3.9	10.3	16.0	9
13004	Chattanooga.....	do.....	Argillaceous limestone.....	168	.20	4.2	9.8	16.0	8
15986	Erin.....	Houston.....	Limestone.....	169	.08	4.5	8.8	15.7	(2)
11521	Asbury.....	Knox.....	Siliceous snifer.....	90	21.32	43.1	.9	13.3	2
11519	Knoxville.....	do.....	Marble.....	169	.23	6.0	6.7	13.0	3
11520	do.....	do.....	do.....	169	.13	7.0	5.7	13.0	2
11522	do.....	do.....	do.....	168	.11	5.5	7.3	13.6	5
11523	do.....	do.....	do.....	168	.11	(2)	(2)	13.6	4
11524	do.....	do.....	do.....	168	.17	6.2	6.5	13.0	3
9887	Mascot.....	do.....	do.....	168	.20	5.5	7.3	13.0	3
16275	Iron City.....	Lawrence.....	Dolomite.....	178	.20	4.1	9.8	15.0	11
10315	Amaco.....	London.....	Argillaceous limestone.....	168	.47	5.0	8.0	16.0	8
10316	Madisonville.....	Monroe.....	Ferruginous sandstone.....	168	.25	6.1	6.6	12.6	3
10317	do.....	do.....	Siliceous limestone.....	178	.41	4.0	10.0	17.3	8
10318	do.....	do.....	Limestone.....	169	.46	6.3	6.4	16.7	9
10322	do.....	do.....	do.....	167	.77	8.3	4.8	16.7	9
10414	Clarksville.....	do.....	Crystalline limestone.....	171	.33	4.2	9.5	17.3	8
17307	Livingston (near)	Montgomery.....	Siliceous dolomite.....	168	.33	6.0	6.6	13.3	5
19013	Byrdstown.....	Overton.....	Limestone.....	174	1.36	3.3	12.2	15.7	18
9734	do.....	Pickett.....	do.....	158	2.05	4.9	8.2	9.7	5
9735	do.....	do.....	Argillaceous dolomite.....	163	2.05	5.9	6.8	12.9	5
15897	Copperhill.....	Polk.....	Smelter slag.....	163	1.64	3.9	9.3	13.2	12
15325	Luttrell.....	Union.....	do.....	(2)	(2)	7.3	7.3	17.3	13
14840	Brayesville.....	Washington.....	Limestone.....	170	.17	6.9	5.8	12.3	5
14464	Johnson City.....	do.....	Siliceous limestone.....	170	.84	6.6	6.1	15.3	4
14841	Washington College.....	do.....	Limestone.....	175	.29	2.5	16.0	17.3	16
				169	.49	5.7	7.0	15.3	5

TEXAS.

10533	Blanket.....	Brown.....	Argillaceous limestone.....	162	1.42	6.7	6.0	(2)	5
13896	New Braunfels.....	Comal.....	Limestone.....	160	2.44	5.5	7.3	11.3	6
20092	do.....	do.....	do.....	161	1.21	5.5	7.3	12.0	(2)
13890	El Paso.....	El Paso.....	Lead slag.....	222	1.60	7.1	5.0	(2)	(2)
15004	(?).....	do.....	Smelter slag.....	224	.80	4.8	8.3	(2)	(2)
15005	(?).....	do.....	Lead smelter slag.....	212	.65	9.8	4.1	(2)	(2)
17633	Fredericksburg.....	Gillespie.....	Limestone.....	(2)	(2)	6.9	5.8	(2)	(2)

2 Test not made.

1 Exact locality not known.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10044	(1) Longview.....	Grayson.....	Clay limestone.....	(2)	134	12.80	(2)	(2)	.0	2
12488	Gregg.....	Gregg.....	Ferruginous conglomerate.....	(2)	153	9.71	1.6	25.8	9.0	3
12489	do.....	do.....	Ferruginous sandstone.....	(2)	178	4.89	2.9	13.7	13.5	6
12490	do.....	do.....	do.....	(2)	150	7.31	2.8	13.9	11.3	3
12491	Gladewater.....	do.....	do.....	(2)	143	9.06	2.4	16.6	3.8	4
(1) 16590	Harrison.....	Harrison.....	do.....	(2)	165	4.72	1.9	21.3	(2)	11
16828	Groesbeck.....	Limestone.....	Siliceous limestone.....	(2)	158	1.32	6.0	6.7	14.0	8
17497	Llano.....	Llano.....	Rhyolite.....	(2)	164	.38	2.3	17.4	19.3	21
17442	Madisonville.....	Madison.....	Sandstone.....	(2)	135	6.62	6.9	13.0	(2)	9
11347	Bowie.....	Montague.....	Quartz conglomerate.....	(2)	148	4.34	1.9	21.6	15.3	6
19458	Mineral Wells.....	Palo Pinto.....	Argillaceous limestone.....	(2)	162	2.39	4.3	9.3	13.3	5
19397	Eldorado.....	Schellacher.....	do.....	(2)	147	5.11	12.4	7.9	5.1	5
19398	do.....	do.....	Limestone.....	(2)	150	5.62	27.3	1.5	12.0	4
17080	Friendship.....	Smith.....	Ferruginous sandstone.....	(2)	166	8.47	41	5.7	17.3	4
17074	Starville.....	do.....	do.....	(2)	177	1.21	5.6	7.1	17.6	11
17020	San Angelo.....	Tom Green.....	Limestone conglomerate.....	(2)	165	4.65	4.8	8.3	13.0	5
17943	do.....	do.....	Dolomite.....	(2)	155	.06	2.8	14.3	13.7	9
13106	Austin.....	Travis.....	Nephalite basalt.....	(2)	195	.06	2.8	14.3	13.7	29
11395	Chico.....	Wise.....	Limestone.....	(2)	169	.30	3.7	7.0	14.3	4
UTAH.										
14250	Price.....	Carbon.....	Limestone.....	(2)	168	0.47	4.9	8.2	16.7	6
14251	Price (near).....	do.....	Argillaceous limestone.....	(2)	166	.91	4.5	8.9	15.3	7
14257	Price.....	do.....	do.....	(2)	156	3.28	5.8	6.9	15.3	7
14258	do.....	do.....	Calcareous sandstone.....	(2)	161	2.15	6.3	6.4	14.7	8
14252	Castle Dale.....	Emery.....	Limestone conglomerate.....	(2)	154	3.93	17.3	2.3	(2)	(2)
14253	do.....	do.....	Argillaceous limestone.....	(2)	168	.48	4.7	8.5	16.0	6
14254	Castle Dale (near).....	do.....	Calcareous sandstone.....	(2)	161	2.08	3.3	12.1	13.3	19
14249	Emery (near).....	do.....	Limestone.....	(2)	162	2.16	7.1	5.6	16.0	12
14867	Poison Spring Bench.....	do.....	Argillaceous limestone.....	(2)	144	5.93	7.3	5.5	12.0	3
15231	do.....	do.....	do.....	(2)	139	4.66	8.4	4.8	10.7	5
(1) 14868	do.....	do.....	Limestone.....	(2)	166	.87	4.7	8.5	16.0	7
14255	Garfield.....	do.....	Calcareous sandstone.....	(2)	166	1.79	7.6	5.3	14.7	(2)
13999	Salt Lake.....	Salt Lake.....	Copper slag.....	(2)	210	1.03	4.9	8.2	(2)	(2)
15107	do.....	do.....	do.....	(2)	202	.27	5.0	8.0	(2)	18
15109	do.....	do.....	do.....	(2)	208	1.37	6.6	8.0	(2)	7
14643	Midvale.....	do.....	Lead slag.....	(2)	221	.97	4.7	8.5	14.7	7

VERMONT.

12190	Hardwick.....	Caledonia.....	Biotite granite.....	165	1.11	(2)	(2)	17.0	8
10848	Burlington.....	Chittendon.....	Siliceous dolomite.....	163	.25	(2)	(2)	17.7	13
11543	do.....	do.....	Siliceous marble.....	177	.78	(2)	(2)	17.6	24
11191	Dorby.....	Orleans.....	Siliceous limestone.....	171	.46	(2)	(2)	17.3	9
11488	Proctor.....	Rutland.....	Variegated marble.....	171	.22	(2)	(2)	18.0	6
11489	do.....	do.....	Black marble.....	171	.17	(2)	(2)	16.7	16
11490	do.....	do.....	do.....	18,753	.26	(2)	(2)	14.3	9
11491	do.....	do.....	do.....	11,015	.32	(2)	(2)	11.0	3
11492	do.....	do.....	do.....	7,750	.55	(2)	(2)	(2)	(2)
11493	do.....	do.....	do.....	6,945	.56	(2)	(2)	.0	2
11494	do.....	do.....	do.....	9,520	.31	(2)	(2)	11.0	2
11495	do.....	do.....	do.....	7,105	.41	(2)	(2)	7.7	2
11496	do.....	do.....	do.....	7,380	.39	(2)	(2)	6.7	3
11497	do.....	do.....	do.....	7,110	.36	(2)	(2)	4.0	3
11498	do.....	do.....	do.....	8,770	.52	(2)	(2)	8.7	3
11499	do.....	do.....	do.....	10,120	.32	(2)	(2)	11.7	3
11500	do.....	do.....	do.....	9,010	.28	(2)	(2)	9.0	3
11501	do.....	do.....	do.....	12,300	.36	(2)	(2)	11.7	4
11502	do.....	do.....	do.....	8,730	.41	(2)	(2)	7.0	3
11528	do.....	do.....	do.....	168	.45	(2)	(2)	7.3	4
9673	Barre.....	Washington.....	Biotite granite.....	165	.37	(2)	(2)	14.3	9
12209	do.....	do.....	do.....	165	.47	(2)	(2)	18.0	11
12200	Bethel.....	Windsor.....	Granite.....	164	.52	(2)	(2)	18.0	11

VIRGINIA.

10253	Charlottesville.....	Albemarle.....	Granite gneiss.....	171	0.75	(2)	(2)	17.3	5
12853	do.....	do.....	Mica schist.....	166	4.13	(2)	(2)	18.0	6
15887	Charlottesville (near).....	do.....	Amphibolite.....	182	1.47	(2)	(2)	15.0	7
19332	Hutton.....	do.....	Altered diabase.....	187	.19	(2)	(2)	18.0	12
13299	Ivy.....	do.....	Amphibolite.....	194	.28	(2)	(2)	17.4	14
13712	do.....	do.....	Biotite gneiss.....	176	.86	(2)	(2)	17.0	8
20582	Mechums River.....	do.....	do.....	178	.46	(2)	(2)	17.0	8
14131	Mechums River (near).....	do.....	do.....	177	.71	(2)	(2)	17.0	6
19161	Scottsville.....	do.....	Sorfdote schist.....	168	.77	(2)	(2)	(2)	(2)
20581	Woods Crossing.....	do.....	Biotite gneiss.....	178	.42	(2)	(2)	18.3	6
9926	(1).....	do.....	do.....	181	.57	(2)	(2)	18.7	9
9927	(1).....	do.....	Horriblende gneiss.....	193	.98	(2)	(2)	16.3	7
9928	(1).....	do.....	Biotite gneiss.....	175	.62	(2)	(2)	17.6	7
11375	(1).....	do.....	Serfote epidote schist.....	165	.69	(2)	(2)	18.3	7
11377	(1).....	do.....	Biotite gneiss.....	173	1.21	(2)	(2)	18.7	3
13298	(1).....	do.....	do.....	176	.77	(2)	(2)	16.7	7
16454	(1).....	do.....	Gneiss.....	169	.69	(2)	(2)	(2)	12
20197	(1).....	do.....	Granite gneiss.....	162	.61	(2)	(2)	11.4	11
10172	Clifton Forge.....	Alleghany.....	Siliceous limestone.....	166	.48	(2)	(2)	17.6	10

² Tests not made.

¹ Exact locality not known.

TABLE 1.—Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
17332	Long Dale.....	Alleghany	Slag.....	(2)	152	1.86	12.0	3.3	(2)	7
20890	do.....	do.	Blast furnace slag.....	(2)	124	3.34	(2)	(2)	16.0	(2)
14870	Lynchburg.....	Amherst.	Amphibolite.....	(2)	188	.81	5.3	7.6	16.7	7
20834	Falls Church (near).	Arlington.	Muscovite granite.....	(2)	162	.55	2.7	14.8	18.7	10
20190	Basic City.....	Augusta.	Slate.....	(2)	163	.37	6.4	6.3	17.0	11
20192	Craigsville.....	do.	Siliceous limestone.....	(2)	172	.22	4.5	8.9	14.7	8
14881	Lone Mountain.....	do.	Limestone.....	(2)	169	.22	5.8	6.9	16.0	4
16776	do.....	do.	Argillaceous dolomite.....	(2)	174	.34	2.8	14.3	16.7	19
13499	Staunton.....	do.	Limestone.....	(2)	175	.09	3.1	12.9	16.0	19
18942	do.....	do.	Siliceous dolomite.....	(2)	176	.62	3.5	11.4	15.3	16
20858	do.....	do.	Dolomite.....	(2)	175	.41	2.9	13.8	16.7	17
20859	do.....	do.	do.....	(2)	175	1.05	3.5	11.4	17.7	12
20860	do.....	do.	do.....	(2)	172	.81	2.9	13.8	15.7	8
20337	do.....	do.	do.....	(2)	168	.24	4.9	8.2	14.0	5
18978	West Virginia.....	do.	Limestone.....	(2)	168	.35	3.4	11.8	16.3	18
12915	(1)	do.	Feldspathic quartzite.....	(2)	162	1.46	4.0	10.0	(2)	(2)
12916	(1)	do.	Sandstone.....	(2)	174	.31	3.5	11.4	16.3	15
12917	(1)	do.	Siliceous limestone.....	(2)	163	1.25	3.5	13.0	16.0	11
12918	(1)	do.	Feldspathic sandstone.....	(2)	178	.45	3.1	12.9	18.0	24
15187	(1)	do.	Sandstone.....	(2)	168	.34	6.3	6.4	18.0	6
15188	(1)	do.	Limestone.....	(2)	169	.51	5.0	5.0	15.7	4
16611	(1)	do.	do.....	(2)	168	.52	5.5	7.3	15.3	9
13990	Lynchburg (west of).	Bedford.	Gabbro.....	(2)	172	.48	4.9	8.2	18.7	10
14224	Major.....	do.	Altered andesite.....	(2)	175	0.31	2.7	14.8	17.3	9
16227	(1)	do.	Horblende gneiss.....	(2)	183	.43	10.0	4.0	16.7	4
16228	(1)	do.	Horblende schist.....	(2)	187	.73	5.6	7.2	16.0	14
16440	(1)	do.	Amphibolite.....	(2)	192	.82	10.3	3.9	(2)	8
16686	(1)	do.	Siliceous dolomite.....	(2)	187	.68	32	4.4	8.3	12
13906	Blue Ridge.....	Botetourt.	do.....	(2)	176	.32	4.4	9.1	16.7	10
14449	do.....	do.	Limestone.....	(2)	174	.17	4.8	8.3	(2)	5
19556	Bonack.....	do.	Dolomite.....	(2)	195	.17	6.2	6.5	15.0	10
13724	Buchanan (near).	do.	Argillaceous dolomite.....	(2)	177	.39	4.2	9.5	16.3	23
15111	do.....	do.	Siliceous dolomite.....	(2)	173	.27	3.3	12.1	17.3	12
16648	Buchanan.....	do.	Calcareous slate.....	(2)	176	.65	3.3	12.1	16.3	9
15452	Salt Petre Cave.....	do.	Dolomite.....	(2)	170	.23	5.5	7.3	(2)	7
11565	Becock (near).	Campbell	Quartz.....	(2)	178	.50	6.7	6.0	16.7	(2)
14651	Becock (near).	do.	Serfite gneiss.....	(2)	165	.33	15.0	2.7	18.0	7
11779	Halsey (near).	do.	Horblende epidosite.....	(2)	165	.77	6.0	6.7	18.0	7
9891	Lone Jack Station.	do.	Quartzite schist.....	(2)	198	.35	3.9	10.2	16.7	(2)
				(2)	159	1.34	12.0	3.3	(2)	(2)

[illegible]

1 Exact locality not known.

2 Test not made.

TABLE 1.—*Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
15767	The Plains.	Fauquier.	Calcareous talc schist.	(2)	180	.81	3.9	10.3	16.7	21
15768	do.	do.	Chlorite talc schist.	(2)	177	1.52	10.7	3.7	(2)	(2)
15769	do.	do.	Chlorite schist.	(2)	181	.72	11.7	3.4	(2)	(2)
15770	do.	do.	Chlorite epidote schist.	(2)	184	.52	3.2	12.5	17.3	24
16308	do.	do.	Hornblende epidote schist.	(2)	185	.40	9.9	4.1	(2)	(2)
16309	do.	do.	Chlorite epidote schist.	(2)	184	.72	7.7	7.7	(2)	(2)
16310	do.	do.	Hornblende epidote schist.	(2)	190	.42	6.2	6.5	(2)	(2)
16312	do.	do.	Chlorite epidote schist.	(2)	187	.44	6.4	6.3	(2)	(2)
16626	do.	do.	do.	(2)	183	.39	4.4	9.1	(2)	(2)
17086	do.	do.	do.	(2)	187	.24	5.3	7.5	15.7	31
18042	do.	do.	Talc epidote schist.	(2)	193	.67	7.9	5.1	(2)	(2)
18043	do.	do.	do.	(2)	193	.78	4.6	8.7	(2)	(2)
18144	do.	do.	Epidote amphibolite.	(2)	193	.32	2.2	18.2	17.7	26
18393	do.	do.	Amphibolite.	(2)	189	.33	2.8	14.3	(2)	(2)
18394	do.	do.	do.	(2)	188	.20	3.3	12.7	17.3	12
9919	Warrenton.	do.	do.	(2)	187	.76	4.6	6.7	(2)	(2)
9920	do.	do.	do.	(2)	181	2.44	5.9	6.7	(2)	(2)
10304	do.	do.	Epidote chlorite schist.	(2)	185	.63	3.5	11.4	14.7	11
13197	(1)	do.	Epidolite.	(2)	202	.54	1.8	22.2	18.3	19
14460	(1)	do.	do.	(2)	194	1.32	6.0	6.7	18.3	10
15896	do.	do.	Chlorite epidote schist.	(2)	187	.48	4.8	8.3	17.0	7
20096	Floyd.	Floyd.	Hornblende mica gneiss.	(2)	168	2.81	10.6	3.8	18.3	10
13765	Shores.	Fluvanna.	Schist.	(2)	181	.44	2.4	16.7	11.7	10
15485	Strathmore.	do.	Chlorite schist.	(2)	185	.33	3.3	12.1	15.0	10
19069	do.	do.	Quartz.	(2)	164	.19	10.2	3.9	(2)	(2)
13194	Winchester (near).	Fredricks.	Limestone.	(2)	169	.02	7.5	5.3	15.3	7
14583	do.	do.	do.	(2)	171	.10	8.4	4.8	15.3	3
14879	do.	do.	Dolomite.	(2)	173	.28	3.5	11.4	16.7	14
14880	do.	do.	Calcareous slate.	(2)	158	3.16	8.9	4.5	.0	5
14969	do.	do.	Dolomite.	(2)	176	.21	3.0	13.3	17.3	15
11246	Bluff City.	Giles.	Quartzite.	(2)	165	.89	3.1	12.9	(2)	(2)
11248	do.	do.	Siliceous dolomite.	(2)	175	.33	3.6	11.1	(2)	(2)
14463	Pembroke.	do.	do.	(2)	177	.30	3.2	12.5	16.3	9
14493	Rippenmeade.	do.	do.	(2)	175	.52	2.7	14.8	17.3	13
11432	Forest Hills.	Henrico.	Broutte granite.	(2)	175	(2)	(2)	(2)	18.0	16
16988	Richmond (near).	do.	do.	(2)	164	.47	3.4	11.8	18.0	10
16519	(1)	do.	Limestone.	(2)	167	.94	5.8	(2)	(2)	5
14584	Dryden.	Lee.	Siliceous limestone.	(2)	168	.30	3.7	7.0	14.7	7

20123	do.	do.	Limestone.	(2)	169	.20	5.8	6.9	15.3	3
20124	do.	do.	do.	(2)	170	.28	5.4	7.4	15.3	6
12378	Stickleyleville	do.	Argillaceous limestone.	(2)	167	.17	9.1	4.4	14.3	8
12379	do.	do.	Limestone.	(2)	165	.17	5.4	11.4	13.3	6
12880	do.	do.	Ferruginous sandstone.	(2)	167	.31	5.3	7.5	8.0	8
13176	do.	do.	Limestone.	(2)	169	.01	6.2	6.4	16.0	8
13917	do.	do.	do.	(2)	168	.34	6.1	6.5	16.3	4
13918	do.	do.	Argillaceous limestone.	(2)	169	.30	6.0	6.6	15.7	5
13641	(1)	do.	Limestone.	(2)	168	.21	5.4	7.4	15.3	11
19723	Albe.	Loudoun.	Altered basalt.	(2)	181	.26	3.7	10.8	17.7	9
20541	do.	do.	Altered diabase.	(2)	177	.73	3.3	12.1	18.0	20
20542	do.	do.	Altered basalt.	(2)	180	.35	3.1	12.9	18.3	12
19722	Areola.	do.	Basalt.	(2)	187	.24	1.9	20.9	18.7	34
16047	Belmont Park.	do.	Gabbroitic diabase.	(2)	(2)	(2)	2.2	18.2	(2)	(2)
16048	do.	do.	do.	(2)	(2)	(2)	2.3	17.4	(2)	(2)
10069	Hamilton (3 mile east)	do.	Amphibolite.	(2)	178	.49	3.9	10.3	17.3	10
15489	Leesburg.	do.	Chlorite epidote schist.	(2)	188	1.20	12.3	3.3	(2)	8
15490	do.	do.	Crystalline limestone.	(2)	172	.92	6.3	6.4	13.7	6
20514	do.	do.	Marble.	(2)	(2)	(2)	4.8	8.3	17.3	10
15487	Luckett.	do.	Limestone conglomerate.	(2)	175	.39	3.8	10.5	17.0	10
15488	do.	do.	Calcareous sandstone.	(2)	151	2.82	3.4	11.8	13.7	17
16257	do.	do.	Conglomerate.	(2)	187	.63	5.8	6.9	(2)	(2)
16414	do.	do.	Limestone conglomerate.	(2)	175	.25	4.1	9.8	(2)	(2)
17087	do.	do.	do.	(2)	174	.33	4.3	9.3	(2)	(2)
18762	do.	do.	do.	(2)	175	.35	5.9	6.8	(2)	(2)
18763	do.	do.	Sericitic schist.	(2)	168	.50	6.7	6.0	18.7	7
18789	do.	do.	Quartzite.	(2)	165	.25	6.2	6.5	19.0	8
14197	Point of Rocks (near)	do.	Sericitic gneiss.	(2)	168	.36	5.7	7.0	19.3	12
14198	do.	do.	Limestone conglomerate.	(2)	175	.33	4.5	8.9	(2)	(2)
19718	(1)	do.	Basalt.	(2)	180	.39	3.2	12.5	17.7	10
14284	Between Blacksburg and New port.	Montgomery	Feldspathic sandstone.	(2)	161	1.73	(2)	(2)	16.7	8
15152	Arrington (near)	Nelson	Amphibolite.	(2)	185	1.42	3.5	11.4	18.3	14
15993	Ryans Mill.	do.	Quartz.	(2)	165	.13	7.8	5.1	19.3	10
15994	do.	do.	Altered gneiss.	(2)	171	1.60	9.3	4.3	18.3	11
15995	do.	do.	Amphibolite.	(2)	192	.61	2.7	14.8	16.3	13
12835	(1)	do.	Biotite gneiss.	(2)	171	.20	6.5	6.2	12.7	11
20322	Barboursville.	Orange.	Micaceous sandstone.	(2)	164	1.61	12.6	3.2	18.0	5
20323	Barboursville (near).	do.	Talc amphibolite.	(2)	182	1.21	12.0	3.3	8.0	5
20324	do.	do.	Micaceous sandstone.	(2)	165	1.17	7.6	5.3	13.3	5
15944	Compton.	Page.	Feldspathic sandstone.	(2)	148	5.55	18.0	2.2	14.3	4
10099	Luray.	do.	Argillaceous limestone.	(2)	167	.75	5.4	7.4	18.3	5
13584	New Design (near).	Pittsylvania.	Biotite gneiss.	(2)	170	.21	4.5	8.9	18.0	6
13071	(1)	do.	Quartz.	(2)	165	.20	13.8	2.9	(2)	(2)
13329	(1)	do.	Biotite gneiss.	(2)	172	.49	4.2	9.5	18.7	10
19943	(1)	do.	Sandstone.	(2)	163	.68	2.8	14.3	18.7	17
19957	(1)	do.	do.	(2)	166	.43	2.7	14.8	17.7	15
10298	Buckland	Prince William.	Diabase.	(2)	173	1.75	(2)	(2)	17.3	16
15366	Ocequan (near).	do.	Altered granite.	(2)	168	1.06	4.7	8.5	19.3	8

^a Classification not known.² Test not made.¹ Exact locality not known.

TABLE 1.—Results of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1922—Continued.

VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
20317	Ocoquan (near).	Prince William.	Granite gneiss.	(2)	170	1.06	(2)	(2)	18.3	8
13919	Draper.	Fulaski.	Siliceous limestone.	(2)	168	.35	5.3	7.5	15.3	7
16025	do.	do.	Argillaceous limestone.	(2)	170	.24	5.4	7.4	15.3	(2)
16026	do.	do.	Siliceous clay limestone.	(2)	165	.20	4.6	8.7	14.7	7
15786	Draper (near).	do.	Limestone.	(2)	167	.71	6.8	5.9	15.0	7
14988	Glenbar (near).	Rappahannock.	Biotite sericite schist.	(2)	176	.64	5.1	7.8	16.0	7
19360	Scrabble.	do.	Feldspathic sandstone.	(2)	164	.60	4.0	10.0	17.7	12
19362	do.	do.	Altered gneiss.	(2)	165	.81	4.9	8.2	17.0	12
14461	Sperryville (near).	do.	Altered granite.	(2)	163	.70	3.8	10.5	18.3	12
19363	Woodville.	do.	Biotite gneiss.	(2)	171	.34	5.0	8.0	17.0	10
19364	do.	do.	do.	(2)	171	.68	5.3	7.5	17.7	8
19542	(1).	do.	Biotite sericite schist.	(2)	173	.38	7.2	5.6	10.0	7
19961	Ronoke.	do.	Dolomite.	(2)	175	.43	3.0	13.3	15.3	11
20580	(1).	do.	do.	(2)	176	.78	7.0	5.7	15.7	4
11549	Buena Vista (near).	Rockbridge.	Limestone.	(2)	176	.78	2.7	14.8	18.3	23
11550	do.	do.	Argillaceous limestone.	(2)	173	.20	2.4	16.7	17.0	11
13041	Glasgow.	do.	Limestone.	(2)	170	.19	4.7	8.5	16.3	9
13042	do.	do.	Argillaceous limestone.	(2)	168	.20	6.4	6.3	12.7	17
12013	Glasgow (near).	do.	Quartzite.	(2)	165	.20	3.0	13.3	(3)	(2)
17929	Natural Bridge.	do.	Crystalline limestone.	(2)	172	.24	5.2	7.7	12.7	5
17935	do.	do.	Argillaceous limestone.	(2)	173	.09	2.4	9.1	18.0	11
14017	Timber Ridge.	do.	Siliceous dolomite.	(2)	182	.32	2.8	14.3	17.9	12
15112	do.	do.	Siliceous limestone.	(2)	177	.19	3.8	10.5	18.3	11
15113	do.	do.	do.	(2)	175	.14	3.0	13.3	17.7	14
16223	(1).	do.	do.	(2)	169	.26	6.0	8.0	13.3	17
17692	Harrisonburg.	do.	Limestone.	(2)	169	2.10	6.0	6.7	12.6	5
16513	Harrisonburg.	Rockingham.	Argillaceous limestone.	(2)	169	.23	5.7	7.0	(2)	5
12783	Ballton.	Russell.	Dolomite.	(2)	175	.08	3.3	12.1	16.7	21
11719	Castlewood.	do.	Limestone.	(2)	171	.15	3.9	10.3	17.3	13
12788	Hansonville.	do.	Argillaceous dolomite.	(2)	169	.74	3.6	11.1	16.7	14
12840	(1).	do.	Limestone.	(2)	171	.08	5.8	6.9	15.3	8
10690	Gates City.	Scott.	Argillaceous limestone.	(2)	168	.38	4.1	9.7	16.0	13
20889	Strasburg Junction.	Shenandoah.	Argillaceous limestone.	(2)	172	.32	4.6	8.7	15.7	7
16011	Alkins.	Smyth.	Dolomite.	(2)	173	.81	6.7	6.0	18.0	4
16110	do.	do.	Argillaceous limestone.	(2)	173	.38	2.8	14.3	16.3	7
16202	do.	do.	Siliceous dolomite.	(2)	174	.67	4.7	8.6	(2)	10
16507	do.	do.	do.	(2)	167	9.02	5.6	7.1	(2)	9
16509	do.	do.	Dolomite.	(2)	174	.74	5.8	6.9	(2)	7
16589	do.	do.	Limestone.	(2)	169	.58	5.4	7.4	13.7	5

19083	do.....	do.	Ferruginous sandstone.	(2)	162	1.53	5.2	7.7	17.7	12
19084	do.....	do.	Argillaceous dolomite.	(2)	177	1.55	6.1	6.6	15.7	5
16503	Groseclose.....	do.	do.	(2)	173	1.51	9.0	4.4	(3)	5
16289	Marion.....	do.	Quartzite.	(2)	162	1.28	4.5	8.7	(2)	(2)
16287	(1).....	do.	Dolomite.	(2)	172	.79	7.0	9.3	(2)	5
11272	Front Royal.....	Warren.	do.	(2)	171	.57	4.3	9.3	14.3	8
17853	Abingdon.....	Washington.	Argillaceous limestone.	(2)	171	.18	5.0	8.0	17.3	8
16021	Holston.....	do.	do.	(2)	168	.15	4.0	10.0	17.0	10
16075	do.....	do.	Siliceous limestone.	(2)	168	.58	5.7	7.0	17.3	8
16178	do.....	do.	Argillaceous limestone.	(2)	169	.55	6.4	6.3	10.0	6
20013	(1).....	do.	Limestone.	(2)	167	.61	5.4	7.4	9.7	8
19085	Coburn (near).....	Wise.	Feldspathic sandstone.	(2)	163	1.59	4.2	9.5	14.3	11
18923	Esserville.....	do.	Sandstone.	(2)	155	2.01	5.3	7.5	16.0	6
18924	do.....	do.	do.	(2)	154	2.40	18.0	7.3	18.0	6
20125	Pattonsville.....	do.	Limestone.	(2)	172	.23	3.8	10.5	14.0	6
16421	St. Paul.....	do.	Argillaceous limestone.	(2)	170	.17	4.9	8.1	(2)	5
19086	St. Paul (near).....	do.	Feldspathic sandstone.	(2)	160	2.16	4.6	8.7	14.7	8
10780	Wise.....	do.	Sandstone.	(2)	158	2.10	4.5	8.8	18.7	10
16111	Rural Retreat (near).....	Wylie.	do.	(2)	169	.23	4.7	8.5	16.7	7

WASHINGTON.

20886	Lopez Island.....	San Juan.	Volcanic sandstone.	(2)	(2)	(2)	3.0	13.3	19.3	(2)
20882	Sinclair Islet.....	Skagit.	Altered basalt.	(2)	(2)	(2)	4.6	8.7	13.7	(2)
20884	do.....	do.	do.	(2)	(2)	(2)	3.7	10.8	16.0	(2)
10239	Cook (3 miles north).....	Skamania.	Basalt.	(2)	177	0.92	2.6	15.4	18.3	24

WEST VIRGINIA.

13886	Belington.....	Barbour.	Sandstone.	(2)	147	2.60	7.7	5.2	17.3	7
10088	Bedington (east of).....	Berkeley.	Argillaceous limestone.	(2)	172	.19	4.9	8.2	16.0	10
10075	do.....	do.	do.	(2)	168	.32	5.6	7.1	(2)	(2)
10066	Berkeley Station.....	do.	Limestone.	(2)	168	.27	6.3	6.4	16.0	4
10065	Blairton (near).....	do.	Argillaceous limestone.	(2)	168	.19	5.1	7.8	16.7	6
10084	do.....	do.	Limestone.	(2)	168	.23	5.9	6.8	16.3	5
10070	Bunker Hill.....	do.	do.	(2)	168	.24	5.1	7.8	16.0	5
10059	Butts Store.....	do.	Feldspathic sandstone.	(2)	140	3.45	7.2	5.6	18.7	10
10085	Cumbo.....	do.	Limestone.	(2)	172	.52	4.6	8.7	16.7	4
10077	Dartsville.....	do.	do.	(2)	168	1.27	4.7	8.0	15.0	4
10079	Falling Water.....	do.	do.	(2)	168	.59	5.6	8.9	16.7	8
10082	Falling Water (near).....	do.	do.	(2)	(2)	(2)	5.6	7.1	(2)	(2)
10083	Falling Water.....	do.	Chert and limestone, mixed.	(2)	168	1.61	3.6	8.5	14.0	4
10063	Ferrill Ridge.....	do.	Limestone.	(2)	168	.46	6.2	6.5	13.7	12
10074	Gerrardstown.....	do.	Argillaceous limestone.	(2)	172		6.5			

1 Exact locality not known.

2 Tests not made.

TABLE 1.—*Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1916, to January 1, 1922—Continued.*

WEST VIRGINIA—Continued.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
10073	Hedgesville (west of).	Berkeley.	Feldspathic sandstone.	(2)	165	.62	2.8	14.3	16.7	19
10062	Inwood (near).	do.	Sandstone.	(2)	144	3.10	16.0	2.4	19.3	2
10067	Jones Springs.	do.	Siliceous limestone.	(2)	168	.81	4.3	2.1	17.3	9
10081	do.	do.	Crystalline limestone.	(2)	168	.87	5.7	7.0	14.0	4
10080	Little Georgetown.	do.	Argillaceous limestone.	(2)	175	.87	6.2	11.1	18.7	10
10064	Martinsburg (south of).	do.	Dolomite.	(2)	178	.81	3.6	6.9	16.3	10
10086	do.	do.	Limestone.	(2)	168	.86	5.8	6.9	18.0	5
10102	Martinsburg.	do.	do.	(2)	(2)	(2)	5.2	7.7	16.7	6
11708	do.	do.	do.	(2)	170	.19	5.9	6.8	14.0	3
14263	do.	do.	do.	(2)	169	.15	(2)	(2)	14.7	6
14265	do.	do.	do.	(2)	170	.08	9.0	13.4	14.7	3
14266	do.	do.	do.	(2)	169	.09	7.3	5.5	14.0	3
19691	do.	do.	Dolomite.	(2)	173	.58	4.8	8.2	17.3	8
10071	Ninetown.	do.	Limestone.	(2)	168	.43	4.9	8.2	16.0	3
10072	Springmills.	do.	do.	(2)	168	.27	4.2	9.5	15.0	4
10078	Tomahawk.	do.	Siliceous limestone.	(2)	168	.27	4.5	8.9	18.3	15
10067	Tomahawk (north of).	do.	Sandstone.	(2)	156	1.66	7.9	5.1	(2)	(2)
10076	Van Clievesville (south of)	do.	Argillaceous limestone.	(2)	168	.36	5.0	8.0	17.0	9
14358	Kingston.	do.	Feldspathic sandstone.	(2)	156	3.06	9.3	4.3	14.3	9
10311	Scherr.	Fayette.	Argillaceous limestone.	(2)	166	.80	5.4	7.4	(2)	(2)
9922	Fort Springs.	Grant.	Limestone.	(2)	168	.24	4.1	9.8	15.7	9
9925	Renick.	do.	Argillaceous limestone.	(2)	168	.66	3.8	10.5	16.3	8
11715	White Sulphur Springs.	do.	Limestone.	(2)	168	.18	4.3	9.3	16.7	11
11715	(1).	do.	Feldspathic sandstone.	(2)	164	.84	3.2	12.5	18.7	14
17856	Wardensville.	do.	Limestone.	(2)	165	.82	3.0	13.3	18.7	14
15486	Clarksburg.	Hardy.	Feldspathic sandstone.	(2)	170	.15	4.9	8.2	13.3	4
10103	Kearneysville.	Harrison.	Limestone.	(2)	154	4.34	4.7	8.5	10.0	8
15988	do.	Jefferson.	do.	(2)	(2)	(2)	2.7	14.8	14.0	6
16209	do.	do.	Argillaceous limestone.	(2)	169	.12	4.8	8.3	(2)	(2)
11609	Charleston (near).	do.	Dolomite.	(2)	177	.40	4.6	8.7	14.7	6
12728	do.	Kanawha.	Feldspathic sandstone.	(2)	157	4.67	4.5	8.9	16.7	6
13706	do.	do.	Sandstone.	(2)	153	3.88	12.2	3.3	12.0	7
13908	Hamlin.	Lincoln.	do.	(2)	156	4.98	8.7	4.6	12.0	5
13992	Logan.	Logan.	Calcareous sandstone.	(2)	169	.86	8.6	4.7	13.3	3
14625	Ridgely.	Marion.	Limestone.	(2)	163	.50	7.5	5.3	13.3	7
16384	Princeton.	Mercer.	Sandstone.	(2)	156	2.80	3.9	9.3	16.0	9
9966	Greer.	Monongalia.	Argillaceous limestone.	(2)	168	.73	4.7	10.3	(2)	8
								8.5	15.7	8

TABLE 1.—Result of physical tests of road-building rock from the United States, Haiti, and Canada—January 1, 1919, to January 1, 1922—Continued.

WISCONSIN.

Serial No.	Town or city.	County.	Name of material.	Crushing strength, pounds per square inch.	Weight per cubic foot.	Absorption, pounds per cubic foot.	Per cent of wear.	French coefficient of wear.	Hardness.	Toughness.
14132	Brillion.....	Calumet.....	Dolomite.....	(2)	173	0.98	4.6	8.7	12.5	4
11971	Springdale.....	Dane.....	do.....	(3)	172	1.27	3.7	10.8	16.0	12
18746	Knovles.....	Dodge.....	do.....	(3)	168	1.30	5.2	7.7	13.7	7
18744	Naspro.....	do.....	do.....	(3)	172	1.01	3.8	10.5	14.7	8
18743	Berlin.....	do.....	do.....	(3)	165	.16	1.9	21.3	19.0	25
9999	Kewaunee.....	Green Lake.....	Rhyolite.....	(4)	175	.63	4.3	9.3	16.0	8
18168	Revaunee.....	Marquette.....	Dolomite.....	(4)	167	1.13	2.2	18.2	19.3	30
18173	Liberty Bluff (near).....	do.....	Altered syenite.....	(4)	157	1.48	17.0	2.4	18.7	7
14676	Montello.....	do.....	Sandstone.....	19,495	164	.25	2.4	16.7	18.7	16
13537	Milwaukee.....	do.....	Granite.....	(4)	166	2.15	6.0	6.7	15.3	9
10014	Wauwatosa.....	do.....	Siliceous limestone.....	(4)	168	2.11	3.7	10.8	14.7	8
11129	Wauwatosa.....	do.....	Argillaceous dolomite.....	(4)	168	2.01	3.8	10.5	15.3	11
11367	Wauwatosa.....	do.....	do.....	16,700	163	3.20	2.1	19.0	14.0	8
12615	(1)	do.....	Argillaceous limestone.....	(2)	166	2.84	4.0	10.0	13.3	7
12616	(1)	do.....	Dolomite.....	(2)	161	2.42	6.4	6.3	12.0	7
12617	(1)	do.....	Argillaceous dolomite.....	(2)	164	3.21	4.5	8.9	14.3	10
12618	(1)	do.....	do.....	(2)	175	.14	6.5	6.1	16.0	6
12619	(1)	do.....	Dolomite.....	(2)	167	2.66	3.7	10.8	14.3	10
10986	Wells.....	do.....	Argillaceous dolomite.....	(2)	162	2.79	4.8	8.3	18.0	5
9970	Blackcreek.....	Monroe.....	Calcareous sandstone.....	(2)	178	.58	4.6	8.7	14.7	9
9971	do.....	do.....	Dolomite.....	(2)	178	.53	4.1	9.8	15.3	8
10022	Belgium.....	do.....	do.....	(2)	175	1.15	7.4	5.5	14.3	8
11638	Mequon.....	do.....	Argillaceous dolomite.....	(2)	174	1.09	3.4	11.8	12.3	7
11638	do.....	do.....	Dolomite.....	22,750	173	1.13	5.6	7.1	15.0	7
20916	Stevens Point.....	Portage.....	do.....	(4)	167	2.39	4.3	9.3	18.7	10
11447	Redgranite.....	Wausau.....	Sandstone.....	27,715	165	.33	1.3	28.5	19.3	14
10159	Grand Rapids.....	Wood.....	Granite.....	(4)	133	1.91	3.3	12.1	18.3	5
10023	(1)	(1)	Sandstone.....	(4)	168	1.05	7.1	5.6	13.3	6
			Dolomite.....	(4)						

CANADA.

13920	Burnt River.....	Ontario Province.....	Siliceous limestone.....	174	0.68	3.1	12.9	15.7	11
16923	Dundas.....	do.....	Dolomite.....	(2)	(2)	4.1	9.8	15.0	13
16924	do.....	do.....	do.....	(4)	(4)	4.3	9.3	14.0	13
17922	do.....	do.....	do.....	(4)	(4)	3.6	11.1	(2)	(2)
17923	do.....	do.....	do.....	(4)	(4)	3.2	12.5	(2)	(2)
20390	do.....	do.....	Argillaceous dolomite.....	33,650	1.31	3.6	11.1	15.0	13
20391	do.....	do.....	Dolomite.....	27,195	1.71	3.6	11.1	14.0	6
20392	do.....	do.....	do.....	25,380	1.62	3.7	10.8	16.0	10
11648	Ottawa (south of).....	do.....	Argillaceous dolomite.....	174	1.74	3.7	10.8	13.7	4
11649	Ottawa (east of).....	do.....	Limestone.....	166	3.05	4.8	8.3	13.7	10
20567	Queenston.....	do.....	Argillaceous dolomite.....	167	.56	4.9	8.2	12.0	4
20568	do.....	do.....	Dolomite.....	170	1.82	4.5	8.9	14.3	4
20569	do.....	do.....	do.....	166	1.61	5.8	6.9	14.3	10
20570	do.....	do.....	do.....	20,500	1.77	4.9	8.2	14.3	9
20571	Walterton.....	do.....	Limestone.....	16,740	1.67	7.4	5.4	13.3	4
9716	Windmill Point.....	do.....	Cherty limestone.....	165	.41	3.9	10.3	13.3	13
11650	Hull (near).....	Quebec Province.....	Dibase.....	184	.54	2.4	16.7	18.0	13
10017	Montreal.....	do.....	Nephrite syenite.....	156	.60	2.2	18.2	18.7	13
10332	Wellesley Island.....	do.....	Biotite granite.....	165	.28	2.9	13.8	18.0	10

DOMINICAN REPUBLIC.

15864	Santo Domingo (near).....	Santo Domingo Province.....	Crystalline limestone.....	143	5.01	24.0	1.7	(2)	(2)
15865	do.....	do.....	Fragmental basalt.....	177	.97	3.5	11.4	18.7	11
15866	South shore of Samana Bay (near Punta del Boca del Inferno).....	do.....	Tuffaceous limestone.....	155	3.01	11.2	3.6	(2)	(2)
15867	Sanchez-Samaua Cross-roads.....	Samana Province.....	Crystalline limestone.....	170	.27	(2)	(2)	8.5	6
16101	Santo Domingo (near).....	Santo Domingo Province.....	Argillaceous limestone.....	178	4.13	6.3	6.4	10.7	5
16103	La Vega Highway, kilometer 30.....	do.....	Altered basalt.....	179	1.14	3.5	11.4	16.7	8
16104	La Vega Highway, kilometer 34.....	do.....	Altered andesite.....	177	1.26	3.9	10.3	13.7	10

HAITI.

19740	Acul Samedi (near).....	Quartz diorite.....	171	0.58	2.8	14.3	18.0	15
19737	Cape Haitien.....	Weathered chert.....	146	4.05	9.1	4.4	17.7	(2)
19742	Limbe (near).....	Serpentine.....	188	1.13	18.7	6.9	18.7	22
19744	Pont Beudet.....	Limestone.....	165	1.11	4.4	9.1	14.7	7

¹ Exact locality not known.² Test not made.

CRUSHING STRENGTH OR COMPRESSION TEST.

This test is made upon a cylindrical test specimen 2 inches in diameter and 2 inches high. Both ends of the specimen, which have been sawed at right angles to the axis of the cylinder, are carefully ground to plane surfaces. The cylinder then is crushed in a 200,000-pound Universal testing machine at a speed of 0.1 inch per minute. A small 2-inch spherical bearing block is placed between the moving head of the machine and the specimen. The average of at least two determinations is reported as the crushing strength, calculated in pounds per square inch. Crushing strength tests are made only when specifically requested.

INTERPRETATION OF RESULTS OF PHYSICAL TESTS.

To interpret the results of the physical tests of road-building rock, the Bureau of Public Roads has adopted a table of general limiting test values for broken stone for the various types of road construction. For general reference, these limiting values, together with comments upon limits shown, are given in Table 3. By comparing the results of tests on a sample of rock with the limits shown in the table a general idea of the types of road construction for which it is best suited may be obtained. It must be emphasized, however, that these values represent average conditions only. For any given material a number of factors such as type of stone, character and volume of traffic, and the character of available material will influence the interpretation to be given the results of the tests. Table 4 contains the total number of rock samples received from the various States which have been tested between January 1, 1916, and December 31, 1921.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916.*

ARKANSAS.

Serial No.	Locality.	County.	Name.	Crushing strength pounds per square inch.
6331	Bald Knob.....	White.....	Sandstone.....	19,860

CONNECTICUT.

9791	Oneco.....	Windham.....	Biotite granite.....	16,635
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ILLINOIS.

4422	Embarras.....	Coles.....	Limestone.....	17,300
5509	Thornton.....	Cook.....	Dolomite.....	23,060
6053	do.....	do.....	do.....	16,880
8711	Hillside.....	do.....	Argillaceous dolomite.....	15,730
4660	Tunnel Hill.....	Johnson.....	Sandstone.....	19,150
7509	Reevesville.....	do.....	Argillaceous limestone.....	25,780
7510	do.....	do.....	do.....	28,400
4764	Kankakee.....	Kankakee.....	Dolomite.....	20,610
5550	do.....	do.....	do.....	17,710
6088	do.....	do.....	Argillaceous dolomite.....	20,830
6165	do.....	do.....	Dolomite.....	11,660
6865	do.....	do.....	do.....	13,500
7298	do.....	do.....	Argillaceous dolomite.....	25,850
7299	do.....	do.....	do.....	20,000
7300	do.....	do.....	do.....	19,008

TABLE 2.—Results of compression tests of rock, made prior to Jan. 1, 1916—Continued.

ILLINOIS—Continued.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
7301	Kankakee	Kankakee	Argillaceous dolomite	19, 700
7302	do.	do.	Dolomite	17, 050
7871	Lehigh	do.	Argillaceous dolomite	16, 700
4421	Alton	Madison	Limestone	15, 100
7422	Brookville	Ogle	Argillaceous dolomite	18, 640
7423	do.	do.	do.	18, 180
5549	Anna	Union	Limestone	19, 510

INDIANA.

5534	Logansport	Cass	Limstone	20, 350
4655	Greensburg	Decatur	Dolomite	17, 960
4658	St. Paul	do.	Limestone	18, 400
4690	Westport	do.	Dolomitic limestone	20, 000
4659	St. Paul	do.	do.	20, 510
5088	do.	do.	Limestone	19, 800
4197	Mitchell	Lawrence	Argillaceous dolomite	12, 250
5027	Bedford	do.	Limestone	6, 900
5029	do.	do.	do.	6, 450
3368	Greencastle	Putnam	do.	16, 000
5737	Osgood	Ripley	do.	14, 470
4657	Wabash	Wabash	Dolomitic limestone	18, 790

IOWA.

5525	Cedar Rapids	Linn	Dolomite limestone	19, 950
5526	La Grande	Marshall	do.	14, 850

KENTUCKY.

5552	Princeton	Caldwell	Dolomitic limestone	23, 860
7688	Cedar Bluff	do.	Argillaceous limestone	25, 720
5921	Limestone	Carter	Limestone	14, 900
5922	Carter	do.	Siliceous limestone	13, 400

MAINE.

7438	Swans Island	Hancock	Biotite granite	18, 400
8745	Vinal Haven	Knox	Granite	20, 020
8768	St. George	do.	do.	22, 800
8769	Vinal Haven	do.	do.	20, 930
8781	St. George	do.	do.	18, 780
9865	do.	do.	do.	17, 150
9996	Long Cove	do.	do.	17, 540
9445	Vinal Haven	do.	Biotite granite	21, 220
10366	St. George	do.	do.	27, 050
7439	Frankford	Waldo	do.	20, 600

MARYLAND.

5611	Mount Savage Junction.	Alleghany	Siliceous limestone	34, 930
4884	Frederick	Frederick	Limestone	17, 580
5694	Havre de Grace	Harford	Gneissoid granite	34, 410
5695	do.	do.	Sericite gneiss	20, 090
5696	do.	do.	Gneissoid granite	21, 670
5697	do.	do.	Amphibolite	34, 380
5698	do.	do.	Gneissoid granite	35, 210
5699	do.	do.	do.	22, 190

TABLE 2.—Results of compression tests of rock, made prior to Jan. 1, 1916—Continued.

MASSACHUSETTS.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
6891	Rockport.....	Essex.....	Biotite granite.....	22,370
6892	do.....	do.....	do.....	23,610
6893	do.....	do.....	do.....	22,670
6894	do.....	do.....	do.....	21,600
8796	do.....	do.....	do.....	23,830
5671	Westfield.....	Hampden.....	Altered diabase.....	32,850
8862	Westford.....	Middlesex.....	Granite.....	13,980
8874	do.....	do.....	do.....	17,000
8875	do.....	do.....	do.....	16,250
5988	West Auburn.....	Worcester.....	Mica gneiss.....	21,950

MICHIGAN.

9593	Calcite.....	Presque Isle.....	Limestone.....	10,300
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MINNESOTA.

5524	Stockton.....	Winona.....	Argillaceous dolomite.....	16,000
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MISSOURI.

6375	Rochefort.....	Boone.....	Limestone.....	13,900
6377	Sweeney.....	Cooper.....	Argillaceous limestone.....	14,900

NEW YORK.

6457	(1).....	Clinton.....	Plagioclase gneiss.....	18,500
6458	(1).....	do.....	Pyroxene gneiss.....	20,500
8011	(1).....	Dutchess.....	Dolomite.....	34,450
5544	Camelo.....	do.....	do.....	29,050
5872	Akron Junction.....	Erie.....	Cherty limestone.....	16,700
6056	do.....	do.....	do.....	31,180
8377	Gloversville.....	Fulton.....	Biotite gneiss.....	14,585
4157	Alexandria Bay.....	Jefferson.....	Granite.....	21,600
8833	do.....	do.....	do.....	26,180
8932	do.....	do.....	do.....	14,150
9129	do.....	do.....	do.....	14,390
9130	do.....	do.....	Gneissoid granite.....	17,600
7437	do.....	do.....	Granite.....	27,200
8012	(1).....	Rockland.....	Gabbroitic diabase.....	31,300
8013	(1).....	do.....	Siliceous dolomite.....	22,200

NEW HAMPSHIRE.

8872	Melford.....	Hillsboro.....	Granite.....	15,059
9010	do.....	do.....	Biotite granite.....	16,640
9011	do.....	do.....	do.....	14,870
9012	do.....	do.....	do.....	18,230
9031	Concord.....	Merrimack.....	Granite.....	16,600
9036	do.....	do.....	do.....	13,420
9037	do.....	do.....	do.....	13,900
8870	do.....	do.....	do.....	15,100

NORTH CAROLINA.

8396	(1).....	Forsythe.....	Granite.....	13,140
8397	(1).....	do.....	Hypersthene gabbro.....	11,880
8682	Spencer Mountain.....	Gaston.....	Feldspathic quartzite.....	31,520
8881	Gastonia.....	do.....	Quartzite.....	17,100
8576	Mooreville.....	Iredell.....	Biotite granite.....	26,000
5373	(1).....	McDowell.....	Sansstone.....	22,600

¹ Exact locality not known.

TABLE 2.—Results of compression tests of rock, made prior to Jan. 1, 1916—Continued.

NORTH CAROLINA—Continued.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
9038	Wilson.....	Wilson.....	Granite.....	16, 070
5956	Stacey.....	Rockingham.....	Granite gneiss.....	23, 223
5496	Sansbury.....	Rowan.....	Granite.....	33, 750
6071	Bostie.....	Rutherford.....	Biotite gneiss.....	16, 100
5497	Mount Airy.....	Surry.....	Granite.....	18, 400
7433	do.....	do.....	do.....	15, 200
8901	do.....	do.....	do.....	5, 100
9048	do.....	do.....	do.....	16, 440
8419	Granita (near).....	Wake.....	Biotite granite.....	14, 160
3807	Wise.....	Warren.....	Granite.....	18, 240
3808	do.....	do.....	do.....	18, 560
5374	(1).....	Yancey.....	Quartzite.....	12, 900

OHIO.

4694	Osborne.....	Clark.....	Dolomitic limestone.....	8, 690
4695	Springfield.....	do.....	Dolomite.....	18, 963
9282	Cleveland.....	Cuyahoga.....	Granite.....	31, 793
9283	do.....	do.....	do.....	27, 900
9284	do.....	do.....	do.....	24, 790
9285	do.....	do.....	do.....	26, 990
9439	do.....	do.....	do.....	24, 900
4378	Sandusky.....	Erie.....	Limestone.....	19, 400
5554	do.....	do.....	do.....	21, 550
5753	Castalia.....	do.....	Dolomitic limestone.....	18, 530
6055	do.....	do.....	Limestone.....	20, 810
5505	Marble Cliff.....	Franklin.....	do.....	16, 750
5506	do.....	do.....	do.....	12, 350
5630	Columbus.....	do.....	Ferruginous sandstone.....	21, 800
4693	Patterson.....	Hardin.....	Dolomite.....	11, 360
5553	Dunkirk.....	do.....	do.....	26, 200
4707	Hillsboro.....	Highland.....	Cherty limestone.....	15, 590
8347	Clarksfield.....	Huron.....	Calcareous sandstone.....	9, 490
4656	Big Springs.....	Logan.....	Argillaceous limestone.....	16, 380
6054	Vulcan.....	Lucas.....	Siliceous limestone.....	25, 480
6057	Holland.....	do.....	Argillaceous limestone.....	19, 430
8402	Toledo, 10 miles west of.....	do.....	Dolomite.....	11, 600
6052	White Rock.....	Ottawa.....	do.....	16, 623
5556	Bloomville.....	Seneca.....	Limestone.....	23, 250
5555	Middleport.....	Van Wert.....	Dolomite.....	25, 200

OKLAHOMA.

3388	Granite.....	Greer.....	Granite.....	18, 000
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PENNSYLVANIA.

5602	Hyndman.....	Bedford.....	Impure limestone.....	24, 150
5603	do.....	do.....	Siliceous limestone.....	21, 860
5632	Birdsboro.....	Berks.....	Altered diabase.....	39, 215
8724	Juniata.....	Blair.....	Argillaceous limestone.....	15, 480
8725	(1).....	do.....	do.....	20, 880
8625	Hazard.....	Carbon.....	Blast-furnace slag.....	9, 000
7973	(1).....	Chester.....	Pyroxene quartzite.....	31, 800
7978	(1).....	do.....	Mica schist.....	23, 500
7979	(1).....	do.....	do.....	23, 900
5578	Salona.....	Clinton.....	Argillaceous limestone.....	18, 710
7844	(1).....	Dauphin.....	Siliceous limestone.....	26, 500
8306	(1).....	do.....	Limestone.....	8, 510
8427	(1).....	do.....	do.....	19, 250
8465	(1).....	do.....	Siliceous dolomite.....	9, 640
8049	(1).....	Elk.....	Ferruginous sandstone.....	14, 150
5771	Indian Creek Station.....	Fayette.....	Calcareous sandstone.....	37, 740
6097	Bidwell.....	do.....	Limestone.....	13, 450

¹ Exact locality not known.

TABLE 2.—Results of compression tests of rock, made prior to Jan. 1, 1916—Continued.

PENNSYLVANIA—Continued.

Serial No.	Locality.	County.	Name	Crushing strength, pounds per square inch.
9347	Connellsville.....	Bedford.....	Impure limestone.....	26, 050
5604	Water Street.....	Huntingdon.....	Feldspathic sandstone.....	22, 330
5557	Walford.....	Lawrence.....	Limestone.....	27, 500
6153	Porter Township.....	Lycoming.....	Argillaceous limestone.....	28, 580
6154	do.....	do.....	do.....	26, 860
6155	do.....	do.....	do.....	18, 610
6156	do.....	do.....	do.....	22, 930
6157	do.....	do.....	Limestone.....	21, 900
6158	do.....	do.....	do.....	14, 160
7980	Port Allegheny.....	McKean.....	Feldspathic sandstone.....	9, 680
8022	(1).....	(1).....	Ferruginous sandstone.....	12, 130
8023	(1).....	(1).....	do.....	14, 000
8024	(1).....	(1).....	do.....	12, 480
3243	Mespadden.....	Somerset.....	Sandstone.....	26, 900
5830	Prompton.....	Wayne.....	Feldspathic sandstone.....	26, 340
5605	Blairsville intersection.....	Westmoreland.....	Siliceous limestone.....	32, 560
7428	York.....	York.....	Dolomitic marble.....	27, 400

RHODE ISLAND.

8867	Westerly.....	Washington.....	Granite.....	11, 740
8868	do.....	do.....	do.....	20, 300
8869	do.....	do.....	do.....	20, 750

SOUTH CAROLINA.

8389	Williamstown.....	Anderson.....	Granite.....	12, 990
5568	Rion.....	Fairfield.....	do.....	29, 180
5586a	do.....	do.....	do.....	25, 790
5586b	do.....	do.....	do.....	19, 240
5586c	do.....	do.....	do.....	33, 880

TENNESSEE.

5597	Quarry.....	Carter.....	Limestone.....	22, 750
5502	Straw Plains.....	Jefferson.....	do.....	21, 730
5504	do.....	do.....	do.....	28, 340
5503	do.....	do.....	Dolomite.....	38, 070
6533	Knoxville.....	Knox.....	Marble.....	17, 970

VERMONT.

5543	East Wallingford.....	Rutland.....	Altered diabase.....	16, 800
8853	Barre.....	Washington.....	Granite.....	19, 560

VIRGINIA.

8804	Albert.....	Bedford.....	Granite gneiss.....	13, 820
6796	(1).....	Dinwiddie.....	Granite.....	13, 150
4900A	Broad Run.....	Fauquier.....	Quartz.....	28, 400
4900B	do.....	do.....	Epidosite.....	28, 000
5923	Strathmore.....	Fluvanna.....	Chlorite epidote schist.....	13, 210
5678	Eggleston (near).....	Giles.....	Dolomite.....	45, 690
5924	Boscobel.....	Goochland.....	Granite gneiss.....	13, 550
6615	Korah Station.....	Henrico.....	Biotite granite.....	20, 300
5925	Greenway.....	Nelson.....	Feldspathic quartzite.....	16, 500
5492	Nokesville.....	Prince William.....	Ferruginous sandstone.....	17, 780
5920	Greenlee.....	Rockbridge.....	Dolomitic marble.....	36, 900
5382	Bluff Water Station.....	Rockingham.....	Limestone.....	21, 450
5385	do.....	do.....	do.....	40, 850
5375	St. Paul.....	Russell.....	do.....	17, 600
7217	Burkes Garden.....	Tazewell.....	Dolomitic sandstone.....	21, 500

¹ Exact locality not known.

TABLE 2.—*Results of compression tests of rock, made prior to Jan. 1, 1916—Continued.*

WEST VIRGINIA.

Serial No.	Locality.	County.	Name.	Crushing strength, pounds per square inch.
5365	Berkeley.....	Berkeley.....	Limestone.....	23,350
5917	Renick.....	Greenbrier.....	Crystalline limestone.....	21,300
5918	Frazier.....	do.....	Limestone.....	17,450
5919	Snow Place.....	do.....	do.....	13,550
7475	Green Spring (east of).....	Hampshire.....	Siliceous limestone.....	34,400
7476	do.....	do.....	Quartzite.....	15,050
6109	Spring Hill.....	Kanawha.....	Sandstone.....	12,400
9132	Fairmont.....	Marion.....	do.....	5,420
9133	do.....	do.....	do.....	5,720
9134	do.....	do.....	do.....	6,080
5610	Sturgis.....	Monongalia.....	Siliceous limestone.....	22,440
5612	do.....	do.....	Limestone.....	17,910
5613	do.....	do.....	Argillaceous limestone.....	14,300
5614	do.....	do.....	Calcareous sandstone.....	29,840
5615	do.....	do.....	Impure limestone.....	19,650
5616	do.....	do.....	Argillaceous limestone.....	24,850
8447	Parkersburg.....	Wood.....	Feldspathic sandstone.....	11,910

WISCONSIN.

5523	Pebbles.....	Fond du Lac.....	Dolomite.....	32,600
3448	Amberg.....	Marquette.....	Biotite granite.....	20,000
8656	Lannon.....	Waukesha.....	Dolomite.....	23,020

TABLE 3.—*General limiting test values.*

Type of construction.	French coefficient of wear.	Toughness.
Water-bound macadam.....	7 or over.....	
Bituminous macadam.....	7 or over.....	
Bituminous concrete.....	8 or over.....	8 or over.
Cement concrete.....	7 or over.....	
Water-bound base course.....	5 or over.....	

Granites, gneisses, schists, sandstones, and quartzites should not, in general, be used in the wearing course of water-bound macadam roads. Shales and slates should never be used in this connection.

For further details and explanation of results in this table and also for tests on all materials to January 1, 1916, see U. S. Department of Agriculture Bulletin 370.

TABLE 4.—*Geographical distribution of samples tested from January 1, 1916, to January 1, 1922.*

State.	Number of samples.	State.	Number of samples.
Alabama.....	31	Illinois.....	21
Arizona.....	10	Indiana.....	45
Arkansas.....	55	Iowa.....	6
California.....	3	Kansas.....	27
Colorado.....	16	Kentucky.....	23
Connecticut.....	21	Louisiana.....	3
Delaware.....	9	Maine.....	46
District of Columbia.....	2	Maryland.....	44
Florida.....	12	Massachusetts.....	127
Georgia.....	131	Michigan.....	21
Idaho.....	2	Minnesota.....	8

TABLE 4.—*Geographical distribution of samples tested from January 1, 1916, to January 1, 1922—Continued.*

State.	Number of sam- ples.	State.	Number of sam- ples.
Mississippi.....	6	South Dakota.....	17
Missouri.....	16	Tennessee.....	36
Montana.....	9	Texas.....	26
Nebraska.....	8	Utah.....	16
New Hampshire.....	19	Vermont.....	23
New Jersey.....	21	Virginia.....	254
New Mexico.....	7	Washington.....	4
New York.....	43	West Virginia.....	96
North Carolina.....	93	Wisconsin.....	23
Ohio.....	123	Canada.....	18
Oklahoma.....	33	Dominican Republic.....	7
Oregon.....	2	Haiti.....	4
Pennsylvania.....	75		
Rhode Island.....	6	Total.....	1,672
South Carolina.....	19		

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